







# THE SOUL:

ITS ORIGIN AND RELATION TO THE BODY; TO THE WORLD; AND TO IMMORTALITY.

BY

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IN TWO PARTS.

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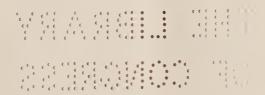
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DEDICATED TO MY FAMILY.



### PREFACE.

I T is customary, in writing a book, to preface the work by some introductory remarks, giving a brief outline of the subject to which the author proposes to call the attention of the reader. The train of reflection presented in these pages grew out of the following circumstance, which came directly under the personal observation of the writer: Briefly stated, I was standing on the right bank of a river, and, having my attention suddenly called to a sound like that of the whistle of a steamboat, I turned in the direction from which the sound proceeded, and saw, in the middle of the stream, a boat pressing against the current, with dense columns of smoke arising from its chimneys. A moment later I saw smoke issuing from the staterooms, accompanied with jets of flame. The boat was on fire, and the passengers-men, women, and children-were pressing in great consternation towards the bow of the boat, from which they were leaping into the turbid waters beneath, to escape from the burning flames that were fast encompassing them. A few moments later I saw the heads of the terrified passengers disappear beneath the surface of the watery element. The sight was of such a terrifying nature that it awoke me.

I had been dreaming. My whole physical frame was thrown into a tremor of great nervous and muscular excitement. I was in bed, and involuntarily covered my face with the bed-clothes, as if to shut out the terrible scene, which for the moment preceding appeared to present all the force and terrifying influence of a distressing reality. The excitement had followed me into the waking state, as if to haunt me still. I saw I had been terrified at a scene presented in a dream. I asked myself the following questions: What is a dream, and what does all this excitement of mind and body mean? Did I see nothing, and have I been thus terrified at nothing?

With these and other questions pressing directly upon the mind, and believing that nature never works in vain, I sought for a rational solution of this very common but mysterious problem. I had just been reading Sir William Hamilton's lectures in regard to the "Philosophy of Perception." In these lectures we have the authority of consciousness applied as a positive and truthful criterion upon which we are assured, through our own emotional feelings and subjective sensations, of the existence of self, and, through our sense-perceptions, the existence of a not-self standing in direct relation to us—a self and a not-self in relation to each other. In the testimony of consciousness, we have certain facts presented to us which serve as a reliable criterion or as data in regard to the ultimate truths of philosophy. Thus, whatever we are made conscious

of by means of our immediate sense-perceptions, that most truly exists. It must have an existence of some kind, either physical or mental; otherwise, in the language of Sir Wm. Hamilton, "God would be a deceiver and our very nature a lie."

Sir Wm. Hamilton has enumerated and given us separate citations from the pages of philosophy, naming one hundred and six prominent authors who have, either directly or indirectly, subscribed to the truth of the deliverances of consciousness in regard to the real or bona fide existence of the phenomena of both mind and matter. In this statement he thus declares that no philosopher has been found bold enough to attempt to set aside its authority as reliable data in questions of "common-sense philosophy." The result of this attempt to set aside the testimony of consciousness has been shown by Fichte, a celebrated German philosopher, who formally pushed the denial of this authority to its ultimate conclusion by tracing it to its true, logical ending in complete and hopeless Nihilism in reference to all things, both mental and material.

Armed with the numerous citations from authorities, as given above by one who has been justly regarded the most erudite of the philosophers, we made a similar application to the dream-phenomenon above mentioned in regard to the authority of consciousness in support of the bona fide existence of the objective phenomena presented, not only to us, but to every man, while in the dream state. Perception is an act of the mind in

relation to an object or phenomenon of some kind, either subjective or objective.

Omitting, for the present, the application of the testimony of consciousness in reference to the phenomena of the waking state, we shall proceed to make an application of it in regard to the dream above related. In this case we were immediately conscious of at least six leading facts by which the existence of the entire dream-phenomenon may be established and applied in regard to this as well as to all other like occasions: First, we were conscious of our own personal existence during the dream. Second, we were also conscious of the existence of certain leading thoughts that arose in the mind in reference to the objective phenomena presented to view. [We expect to show that there can be no dream without corresponding accompanying thoughts in connection with the phenomena presented. To think in sleep is to dream. Third, we were conscious of the particular subject which at the time engaged the attention of the mind. Fourth, we were conscious of hearing a sound resembling that of the whistle of a steamboat. Fifth, we were conscious of witnessing the objective scenery presented to our view, as well as its direct spatial relation to us at the time. And, sixth, we were conscious of experiencing a high degree of emotional feeling of excitement, the continuance of which feeling was directly verified to us immediately after by its transference from the sleeping to the waking condition of the nervous system; thus

demonstrating that part of the dream-phenomenon in both states.

Now, if the testimony of consciousness should fail to verify any one of the above particulars enumerated, the question would at once arise, Which deliverance is true, and which is false? As runs the legal brocard, "Falsus in uno, falsus in omnibus," would apply here the same as in legal proceedings. If the veracity of the testimony of our consciousness can be set aside or invalidated in any one of the above particulars, it would throw a suspicion upon all its deliverances, which would place us entirely beyond all direct means of establishing the fact of the existence of the phenomena of either mind or matter. In that case we should be unable to establish the fact of the existence of either sensations, perceptions, or thoughts, thus logically annulling the truth of any and all testimony of our own existence, both in the waking and dream states of the mind. The consequence of such a logical procedure as a denial of the authority of the deliverance of consciousness, like that stated above, would have the effect of throwing over us an oblivion of darkness equal to that which overshadowed our impersonal existence during the countless millions of years of the past, which precedes our present personal form of existence, thus rendering all past and present time a state of darkness and hopeless oblivion. We must either accept all the deliverances of consciousness, or reject them all. There is no middle ground upon this subject; for there is no

higher authority to which we can appeal to prove by any system of logical argumentation the existence of our own perceptions in regard to the existence of the phenomena of either matter or mind.

If we can not depend upon the testimony arising within us of our own self-consciousness to establish the fact of the existence of every part of the dreamphenomenon in regard to the existence of ourselves and in regard to the bona fide existence of an objective scenery of some kind surrounding us at the time, we should then fail to prove our own existence at such times, or even show that we had ever experienced a dream, or that it had ever been witnessed by any member of the human family. And thus the very foundation of all thought, philosophy, and logic would be entirely swept away, leaving in its stead, as a logical result, a complete nihilism in regard to the existence of both mind and matter. If, on the other hand, we accept without reserve the authority of consciousness in regard to our perceptions, we are presented with two classes of phenomena, both equally certain, both equally reliable, in reference to their existence. Each class is controlled by a separate system of laws: one class pertaining to the phenomena of matter, the other to the phenomena of mind. Both classes of phenomena are directly presented to us in the forms of sense-perception. We cognize one class through the senses of the body when awake; the other, when the functions

of the brain and special nerves of sense are normally suspended during sleep. One class of phenomena relates to the present physical state of existence; the other points us to a separate state of existence of the soul hereafter, when disconnected from the body. One class relates to time, the other to eternity.

Before proceeding, however, to consider the dreamphenomenon in reference to a future state of existence, we must first show what is sleep, and how the dreamphenomena are produced while in this peculiar torpitude of the nervous system. We must also show what are the relation and bearing of the dream-phenomena to the thoughts of the dreamer as presented in sensephenomena before him, as well as their bearing in reference to a future state of the existence of the soul after the death of the body has shut off its connection and relation to the physical world. This will be the work of the following pages. But before entering upon the consideration of these points of inquiry, we must show when the soul is formed and how it is connected to the several parts of the body, and likewise show its relation, through the different sense-organs of the body, to the world around it, as well as to point out certain special powers adapting it to immortality, together with other questions having more or less direct bearing upon these controverted points, which will receive attention as we proceed. In attempting to answer such questions as are involved in the above, which have been so often

asked, but perhaps seldom or never satisfactorily answered, we are compelled to ask a reasonable indulgence on the part of the reader before making up his final decision in regard to the merits of the questions involved in these inquiries.

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#### INTRODUCTION.

I GLADLY write an introduction to Dr. Collins's volume for four reasons:

First. I found the manuscript of the volume intensely interesting. I began reading it one afternoon, and continued reading long into the night, finishing it the next day. It is impossible to test a volume by the interest which it awakens in one person, as it may not awaken a similar interest in other minds. Indeed, a book may not awaken the same interest in the same mind if read at different stages of one's experience. can not, however, think that my interest in the great problems of the relation of the soul to the body, of immortality, etc., is a personal one. Surely thousands of ministers and students and thoughtful laymen are pondering the problems of the spirit in the new light which modern science is throwing upon them. are wondering how far evolution affects our belief in the reality of spirit and in the doctrine of immor-This interest is shown by such books as Newman Smythe's "Place of Death in Evolution" and John Fiske's "Destiny of Man." My first reason, therefore, for believing that Dr. Collins's volume will do good is my conviction that it will prove interesting and be read by a large number of persons.

Second. The book impresses me as organic. It is a living whole. Not a chapter can be cut out without taking away a part of the argument. The book contains some repetitions, but these are necessary on account of the presentation of the subject in a novel light. The various positions of the author must be repeated with sufficient frequency to make a clear and definite impression upon the reader's mind. But the volume as a whole is not bulky, and it possesses that unity which comes from long thought by an author upon the materials of his volume. Milton says, in substance, that every great poem is the life-blood of a noble soul. This book seems to me to be a living product of a thoughtful mind.

Third. The volume impresses me as a scientific contribution to a spiritual subject. It is said that Darwin carried on experiments for twenty years before writing his volume upon Earth Worms. Dr. Collins has pondered upon the problems discussed for a generation. The book has been in his mind, and he has been making observations and gathering materials for it during all these years. This is a volume by a layman. Dr. Collins has been a successful practicing physician for half a century, and in some cases has ministered to four succeeding generations in a single family. During all these years he has studied the great problems of psychology and of religion from the standpoint of a practicing physician. Instead of becoming a skeptic through his observations of the intimate rela-

tions between mind and body, his experiments and meditations have confirmed him in the Biblical view of the reality and independence of the spirit. I am still further confirmed in my estimate of the interest of this volume by the testimony of one of the ablest professors of philosophy in this country, who has also read the manuscript and tells me that it makes a real contribution to the subject of psychology and its relation to modern science. Surely if one does not agree with all his arguments, he will respect the convictions of a man who has experimented and meditated for a generation before pronouncing judgment upon the questions of deepest interest to our modern world.

Fourth. The volume furnishes a new and striking argument for the doctrine of immortality. Personally, I confess that I have found great difficulty in presenting an argument for immortality outside of the Bible which would be convincing to a skeptic. While not personally doubting the doctrine, I have often been unable to give reasons for the faith that is within me. Hence I hail this volume as a fresh contribution to one of the oldest subjects with which the human mind has grappled. Life is short at the longest. ambitions are out of all proportion to the earthly platform on which we play our parts. Any possible light which may be thrown upon the problem of our future life, any strengthening of old convictions, any presentation of fresh arguments, will be welcomed eagerly by earnest searchers for the truth.

I deem it an honor, therefore, to present Dr. Collins to his readers with this brief introduction. May his volume help thousands to walk in the path of Christian faith in which he has walked for so many years, and to reach at last the great home toward which he is eagerly looking forward!

J. W. BASHFORD.

Delaware, O., February, 1901.

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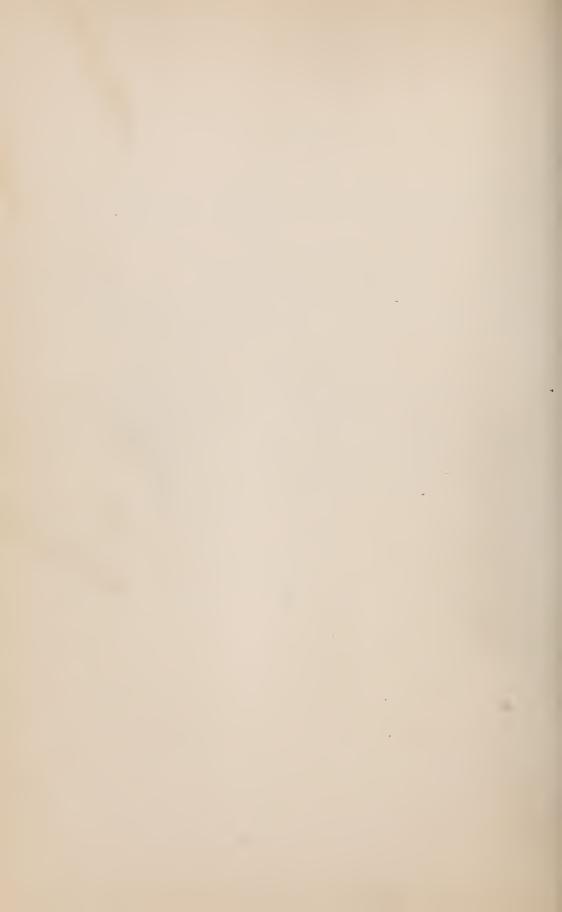
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## PART I.

THE ORIGIN OF THE SOUL, ITS CONNECTION AND RELATION TO THE BODY.



EVERY ANIMAL ORGANISM MAY BE TRACED BACK TO AN ULTIMATE POINT OR BEGINNING IN A FECUNDATED OVUM OR GERM-CELL.

Section 1.—The Soul transmitted from Parentage at Fecundation.

Section 2.—Fecundation indispensable to the Perpetuation of the Vegetable Kingdom.

THE opinion has been very generally maintained that Man is a compound being, consisting of Matter and Spirit-body and mind; or, to make use of another form of expression: Man is a personal, spiritual being, with a physical body annexed. The personal form of the body and soul may be traced, in the first place, to a beginning, or common origin, and connection in the germ-cell. The union and development of both may be followed in the course of their procedure into a personal form: the body formed to serve as a tenement and instrumentality for the use of the soul during life. But before entering upon the subject of the personal form of the soul, we must first consider it in reference to its origin and connection with the vitalized molecules that compose the germ-cell, in which both the body and the soul unfold together from the impersonal to a personal form of existence.

The soul constructs the body cell by cell, beginning with the germ-cell at the period of fecundation.

In what does the process of fecundation consist? Fecundation consists in the paternal germ-cell imparting a reproductive influence or causal agent to the maternal ovule. This process can take place only between germ-cells of the opposite sex belonging to the same species. The exception to the last-named rule is exceedingly rare; and in such instances where fecundation does take place between the opposite sex of a different species from each other, it almost invariably results in hibridity of the progeny. Among all the numerous tribes of the animal kingdom the development of each animal may be traced back to a mere point in the ovum, or egg. Each egg contains within its structure a minute cell, called the germ-cell. Within the latter there is a small particle of opaque substance, known as the nucleus, which contains a smaller one, called the nucleolus, or germinal dot. The germ-cell, like all other cells of which the different tissues of the body are composed, consists of an enveloping membrane or cell-wall, inclosing a nucleus, in which is a small granule, or nucleolus. The nucleolus, however, is not always present in the cells composing the tissues. Besides the different parts of the cell to which we have here alluded, all recent cells (whether ovule-cells or whether they be cells that compose the tissues of the body) contain a small particle of fluid, transparent germinal matter called Bioplasm. All the different tissues of the body are composed of minute cells, which do not present any very marked difference from the initial germ-cell, from which most of the cells of the body proceed by a course of continuous succession through certain modes of cell-multiplication, as by division, germination, etc. These different modes of cell-formation, however, will be referred to from time to time as we proceed.

Although there is no very marked physical difference to be observed between the germ-cells and the cells of the tissues, yet there is evidently a very important difference existing between these two classes of cells in reference to the office they fulfill in the The difference to which we here animal economy. refer consists mainly in the fact that the germ-cell contains within it an active causal principle necessary to the formation or production of the animal, a principle which is capable of varying the form and structure of each animal so as to make it conform to the genera and species to which its parents belonged in the animal scale. There is in each animal, not only a conformity of structure suited to the genera and species of each, but likewise a conformity in regard to the intellectual endowments which characterize its parentage and species. Every animal bears unmistakable marks of intelligence, which are suited to its own proper sphere of existence. The intelligence manifested by the different races of animals may be said to be one of degree rather than of kind. Accordingly there

is but one principle of intelligence pervading the entire animal kingdom; and that one is generally designated by the well-known appellation of Mind. As runs the paraphrase on the lines of Epicharmus:

"What sees is mind, what hears is mind; All beside is deaf and blind."

We can not assume the existence of two or more separate and distinct principles or entities for the performance of the office of seeing or hearing without violating one of the fundamental rules of logic; viz., that of supposing the existence of two separate and independent entities to perform the same action, which, one of the principles embraced in the supposition, is known to be capable of performing to the exclusion of the other. For instance, there are not two distinct and entirely separate entities for the office of seeing and hearing, one for man and one for the lower ani-Wherever the office of seeing and hearing is found to exist, either in man or in the lower animals, there is a sentient or intellectual principle which sees and hears. It is not necessary, therefore, to suppose the existence of two entirely different entities to perform the same office that one of these is known to be capable of performing without the aid or substitution of the other. We are not, therefore, justified in the conclusion that because there is a gradation of intelligence pervading the entire animal scale, that in one instance it is Instinct that sees and hears, while

in the other it is Intellect that sees and hears. But if there is only one principle of intelligence pervading the animal kingdom, whence is this principle derived which is capable of manifesting these different degrees of intelligence suited to the numerous animal tribes?

As every animal is known to proceed from a germcell, so all the powers concerned in the manifestation of intelligence pertaining to each must exist in the germ from which the animal is derived. But this statement does not hold good until after the act of fecundation has taken place, except by a union of the paternal and maternal germ-cells. There is contained within each of these cells a particle of highly-vitalized germinal matter, called Bioplasm, which contains, respectively, the true fecundating principle of the egg, or germ-cell. The maternal cell, when not fecundated, invariably perishes, without ever manifesting the slightest indications of passing beyond the simple cell-state; but after fecundation has taken place, we see within the germ-cell the commencement of the work of organizing a new and independent being, closely resembling in structure the form of the parents which were immediately concerned in the fecundation of the ovum. Hence we are led to conclude that by this process both parents have, in some measure, contributed to the formation of the new being. In what, then, does the process of fecundation consist? What is it that is added to the maternal ovule which produces such a remarkable change in regard to its subsequent destiny,

and which not only prevents it from perishing almost as soon as formed, but directly sets up the process of organizing a new being, endowed with a sentient principle capable of manifesting psychical powers in all respects like those of the genera and species to which its parents belonged?

Prior to the act of fecundation the maternal ovulecell is passive. It manifests no perceptible movement whatever towards the formation of an organism, while the spermatozoid cell furnished by the male exhibits a remarkable degree of activity. Whenever, therefore, those cells are brought into proximity and contact with each other, the spermatozoid cell inserts itself completely into the very central part of the structure of the maternal ovule, and fecundation is the result of this union. Everything necessary to the formation of the new animal is by this means added to the newlyfecundated germ. After fecundation has taken place, the respective conditions of the two cells undergo remarkable change. The spermatozoid cell, so active the moment before this occurrence, now loses its identity, while the ovule cell puts on remarkable signs of activity. Prior to this union neither of the cells is capable of setting up the work of organizing a new being. Each cell contains only a part, but a very necessary part, of the principle required in the formation of a living animal. Hence, without a direct union of the germ-cells of the opposite sex, there could be no organization, sensation, nor intelligence; in short,

neither body nor soul. Inasmuch, then, as the process of fecundation enables the maternal ovule to set up an independent and spontaneous work of organizing a new creature resembling in all respects the particular form and character of the parents from which it has been derived, and by whose combined agency the germcell was fecundated, there must be a *something* added by this operation to the maternal germ capable of setting up a new and independent work, which the cell itself was wholly incapable of performing prior to this act.

What, then, is the principle imparted by this contact of the paternal cell with the maternal ovule, by which the identity of the former is lost, while the latter develops into a being resembling in a very marked degree the physical form and mental character of the parents? There are three separate and distinct principles that belong to every animal which may be taken into consideration in the answer to this question; viz., the material, the vital, and the psychical. All others as the electric, the magnetic, and the calorific-may be left entirely out of the account. In the first enumeration, the corporeal enters into the composition of the body; the vital is generally supposed to be concerned in the formation of the body and in its vital processes; while the psychical principle, especially in man, is supposed to be engaged in thought, feeling, emotion, will, The existence of these principles is so generally admitted that the introduction of proof may be deemed

quite unnecessary in this place. Indeed, the arguments that may be introduced to set aside the existence of matter are as conclusive as any that might be brought to bear against the existence of either of the others. The existence of matter can be known only by its phenomenal manifestations; and so of the others. It is not the material atoms simply that are added to the maternal ovule by the process of fecundation; for the ovule-cell already contained these as a necessary ingredient of its own structure. It can not be the calorific principle that is imparted; for this is imparted from one body to another, whether animate or inanimate, and is lost again by means of irradiation or the changes of temperature. It is not by imparting the electric or magnetic agents that fecundation is accomplished; for the germ-cells show no signs of magnetic or electric disturbance, neither before nor after their contact with each other. Nor is it the vital principle that is here added; for the principle of life already existed in the maternal ovule prior to the fecundating act. This is conclusive from the fact that an unvitalized or dead cell can not be fecundated. That the vital principle is capable of existing in cells when separated from the body is evident from its existence in the blood after being drawn from the veins, and also from its separate existence in the white-blood corpuscles before they are taken up by the co-ordinating agency into the different tissues of the body. The only remaining agent to be considered, then, is the sentient or psychical principle.

This principle we find existing in every animal that feels and sees and hears. As in the lines already referred to,—

"What sees is mind, what hears is mind."

Nothing sees and hears but mind. The term "mind" we use in this connection simply as another name for the psychical principle. And of all the different principles just referred to, the psychical principle is the only one that truly bears the marks of hereditary transmission. That this principle is not derived exclusively from one parent is evident from the fact that in very many instances the mental endowments of the offspring manifest in a very striking manner the mental characteristics of one parent, while in other members of the same family we see the mental traits of the opposite parent as strongly portrayed. Thus in some families the offspring will in one or more instances manifest the peculiar mental tendencies belonging to the paternal side, while other members of the same family will exhibit strong and very striking resemblance to the mental peculiarities of the maternal side. That the forces which build the body are transmitted from both parents is evident from the fact that in the cross between the European race and the African Negro the skin fades and the wool changes to hair just in proportion to the amount of Caucasian blood circulating in the veins of the offspring; and where one of the parents, or both, are found to be idiotic, the transmission of the

mental deficiency is fearfully manifested in one or more, or in all their progeny, as the case may be, in regard to the mental deficiency existing in one or both of the parents. These facts, with numerous others that might be cited, show that the psychical or sentient principle is transmitted by the laws of hereditary descent; and that both parents contribute to its production. case of domestic animals, such as the horse, we may obtain almost any disposition within the range of the species by giving proper attention to the cross. law holds good everywhere throughout the animal kingdom. We see every pair of each species transmitting to its progeny the mental character of its own species, and never in any instance transmitting the mental character belonging to a different species. Thus we never see the lion transmitting to its progeny the mild and timid disposition of either the hare or the lamb, nor vice versa. In accordance with this law, we always find each species in the animal kingdom steadily preserving its own peculiar mental character and disposition from age to age.

The vital principle alone nowhere shows such evidence of hereditary transmission and differentiation as is observed in reference to the psychical agent. The vital principle is the same in every moving blood-corpuscle found among the different species of animals; while the psychical principle, as we have said, is found to present very striking differences of mental disposition and traits of character in regard to every class,

genus, and species found upon the earth. Each species has its own peculiar mental characteristics, which as distinctly mark it as a species as does its bodily con-The psychical manifestations, however formation. slight in their appearance among individuals low down in the animal scale, bear a most striking resemblance to those of its own genus or species, as well as to its own immediate progenitors. But in man more especially, in whom the mental powers are most manifest and observed, we see the mental peculiarities (often amounting to eccentricities of character) of one or both parents well marked in different members of the offspring. These striking exemplifications of character in the progeny (sometimes inclining to one parent, and sometimes to the other) could not be expected to take place with such frequency, if indeed at all, unless both parents contributed to its production. And this contribution by the parents to the production of the inherent powers of the psychical agent, as exhibited in the progeny, could not take place except through the laws of hereditary descent; and these laws are established and set in operation only by the conjugal process of fecundation. That the soul begins its career with the body is evident from its unfolding powers, beginning, as it were, at zero, and unfolding its operations as the body unfolds—appearing in the first place entirely destitute of all manifestations of sensibility, and finally, in man, ending by a gradual process of development into complete rationality. As the body is

the living tenement of the sentient, personal soul, so the sexual or reproductive cells are the repositories of the impersonal, psychical agents, which unite together in the act of fecundation to form a personal being. But the personal soul thus formed does not arise into conscious personality until it has formed suitable organs to aid in the development of its conscious powers. Starting, then, with the paternal cell in the form of the spermatozoid, with its living protoplasm, it penetrates by means of its motile force to the central part of the maternal ovule, where the two cells blend their protoplasmic contents together; and by this means the impersonal, psychical agents of both sexes are brought together, and by thus forming an indissoluble union in the living protoplasm of these sexual cells the personal soul is formed. Microscopic observations show that as the spermatozoid enters the walls of the maternal germ-cell, the vitalized liquid contents of the latter may be seen to rise by an amœboid movement toward the entering spermatozoid, thus showing a direct affinity between the germinal psychical contents of the uniting cells; and although the fecundated cell may continue to be surrounded by numerous other spermatozoa like the one that penetrated it, there is no further tendency manifested between the remaining spermatozoid cells to unite with the fecundated ovules. is, doubtless, owing to a complete neutralization of its psychical cell-contents having already taken place.

The paternal cell that imparts its impersonal psy-

chical principle (which is its true germinal principle) to the ovule-cell is dissolved in the liquid contents of the latter, and thus completely loses its identity as a distinct cell, while the fecundated ovule, which now contains all that is necessary to the formation of the future animal, develops into an organized being, resembling, both physically and mentally, the combined characteristics of the parents. It is mostly in consequence of the impersonal, psychical entity contained in the germ-cells of the parents that these cells are characterized as cells of reproduction; for without this agent as a causal energy they would not differ very essentially from the other cells that compose the organism. Both the paternal and maternal germ-cells are in possession of vitality before fecundation takes place; but neither of them possesses the slightest capability of multiplying into other cells, so as to form tissue, until after the psychical union above referred to has taken place. The fecundated cell, having both a vital and a psychical agent indissolubly united together, is now ready to build up an organism suited to all requirements and wants of the personal psychical principle that occupies it. Let us now devote a few moments' attention to the operation of these agents in the building of the organic structure.

When the maternal ovule-cell is once ensouled by the blending of the psychical agents of the two cells, it immediately shows signs of great activity by the changes which then take place in its plasmic cell-con-

tents. It is now prepared to begin the work of organizing a new being, a work which it could not have performed prior to the fecundating act; for the fecundated cell now contains, for the first time in its history, all that is necessary for the perfecting of the future animal. Where everything is favorable—such as heat, moisture, etc.—it immediately commences forming a structure; first, by the imbibition of nutrient material through the cell-wall; and second, by elongating the nucleus of the germ-cell. The elongated nucleus divides in the middle into two daughter-cells, and these again divide into four, and the four into eight, and so on, by similar ratio of segmentation of the yolk, cells are multiplied almost innumerably as the work of organization goes on. As cells multiply, they are co-ordinated and woven into tissue in accordance with a definite plan of development suited to the forthcoming organization, which, in all cases, must correspond with the requirements and wants of the personal, psychical agent that occupies it, and for whose use the living structure is being built up.

But in order to understand the forces concerned in the operations of life, we must first take into consideration certain powers of the psychical agent itself.

It is a well-established principle, which has been long maintained by a very large majority of the *philosophers* that between matter and spirit (as between the non-extended soul and the body) there can be no direct or immediate relation existing, such as the relation of

direct contact—action or reaction—arising between these diverse entities. Seeing that matter and spirit are essentially different entities, it is claimed by many that there can be no direct relation, no properties in common; hence no mutual intercourse can be carried on between the body and the soul. The teaching of the philosophers in this respect is undoubtedly correct, as between the soul and lifeless matter, as between the soul and the body, when the latter is dead. It may be asked, then, How can there be a relation existing between the psychical principle and the maternal particles of which the ovule-cell is composed, assuming that the psychical principle is the true fecundating agent? We answer that in fecundation the psychical principle does not unite directly with the material particles of the cell, but forms a direct, indissoluble union with the vital principle existing in the cell; for, as already stated, a dead or lifeless cell can not be fecundated. In fecundation the psychical elements of each cell combine together, and at the same time enter into complete union with the vital principle of the germ-cell; and thus the psychical agent re-enforces the vital principle with a new class of powers, which, prior to this union, the latter did not possess. The vital principle alone may form a cell de novo, as in the case of white-blood corpuscles; but it has no power to form cells by any of the other modes of cell-multiplication, and hence it is without power to form tissue. In like manner, the psychical principle, without the aid of the vital, can form neither

cells nor tissue; for the formation of cells must precede the formation of tissue. But when these two agents are united together, as when fecundation takes place, then, and not till then, can the germ-cell divide and subdivide so as to form cells, without which no tissue can be formed, and without the formation of tissue no organism could be formed. The power, then, which forms cells and co-ordinates them into the formation of the organism is not the work of either a vital force or of a psychical force alone, but is the work of a psycho-vital energy. The vital principle forms the connecting link, not only between the soul and the ovule, or first cell, but likewise between it and every other cell of which the body is composed. Of these two agents, therefore, the vital principle alone forms a direct or immediate relation with the molecules of the cells, while the psychical agent has an immediate relation only with the vital principle with which it completely affiliates and hence re-enforces with a new class of There is, therefore, only a temporary and indirect relation existing between the soul and the cells of the body, thus holding its frail tenure with the body through the vital link alone.

In the formation of cells from the germ-cell the latter divides in the center into two, and by a similar process the two divide into four, and the four into eight, and so on, by continuous cell-multiplication, until the whole body is formed. The same psychical principle that was imparted to the germ-cell by the process of fecundation

extends from cell to cell, as cells are formed by means of the division of the vitalized contents of the germplasm; and so on from cell to cell during the formation of the entire body. Thus, if the paternal and the maternal fecundating principles which formed a union in the germ-cell did not continue their connection from one cell to another, the division and formation of cells would immediately cease, and the organizing process would abruptly come to an end, and so the formation of both soul and body would fail to take place. was a time in reference to every man when neither the soul nor the body existed in personal form. the soul and the body are connected together throughout solely by means of the myriads of cells that form the organism. Every cell of which the body is composed is, in a certain sense, ensouled. Accordingly we may say, in the language of Emerson, that "the whole soul is embodied, and the whole body is ensouled." The soul constructs the body for its own use as a tenement, which it occupies during life. Thus the soul, as well as the body, exists in personal form. That the soul is in the form of the body we expect to show to the ocular demonstration of every man that thinks and reasons; but of this in its proper place. We have said that every cell of which the body is composed is, in a certain sense, ensouled. To this rule there is but one well-marked exception, which pertains solely to the ovarian cells. These cells, having lost the paternal counterpart, contain only the maternal principles which

render this class of cells susceptible of the fecundating process, resulting in a new and independent being similar to that of its parentage.

Having considered the relation of the soul to the vital principle, we are next brought to the consideration of the nature and character of the powers which the soul employs in connection with the vital principle in the construction of the body. For this purpose we divide the psychical powers into two distinct classes; viz., the unconscious, instinctive powers and the conscious powers. The latter class of powers does not appear until after the sense-organs are formed and brought into exercise, which takes place not till after birth. These organs are the necessary instruments required for the development of the percipient powers, which pertain to the mental class of the psychical powers. Of the two classes of powers here referred to, the unconscious powers are the first to appear, because they are necessary in aiding the vital principle to construct the organism and carry on the movements of organic life. This class of powers operates instinctively, unconsciously, and unceasingly throughout life. generally admitted by physiologists that all the operations of organic life are carried on by a class of instinctive movements. The instinctive operations which, in the first place, construct the body and at the same time carry on the different organic functions, can not be the work of the vital principle alone; for this principle is not capable of performing these functions in

the germ-cell prior to its becoming fecundated, nor does this principle manifest any such signs or capabilities in the white blood-corpuscles while these are moving in the current of the blood, for these vitalized corpuscles show no signs whatever of cell multiplication, either by division or by germination, which is one of the very first and necessary steps taken in the formation of tissue; and without tissue-formation there can be no organization. These living corpuscles then show no such powers until they have entered the capillary system of blood-vessels, where they are taken up into the various tissues by the direct agency of the "formative principle." We are therefore forced to the conclusion that the vital principle is not the instinctive principle which presides over the formation of the living tenement. If the vital principle, then, can not build the body by its own direct agency, it must be the psychical occupant that serves as the great, instinctive artificer in the formation of its own tenement. If the soul is at all connected with the organism, it must be by means of special laws; and these laws, not being manifest to our consciousness, must operate unfelt by us. The opinion has been almost universally maintained that the vital principle alone builds the body, and that in each case, whether of individuals or species, it builds the organism to suit the psychical powers which are destined to make use of it after birth. On the contrary, we hold that the vital principle is only a subordinate agent concerned in this work, and that

the psychical principle, which co-operates with the vital, is the leading factor in the formation of the organism, and that for the performance of this work it is endowed with a class of *instinctive* powers. Before the soul can attain to its higher powers it must have an organism with suitable sense-organs for the performance of the office of sensation and perception, without which there can be no intelligence manifested by either man or animal.

We have just said that the unconscious powers of the soul, which are immediately concerned in building the body and in carrying on the functions of organic life, are instinctive in their nature. I would define pure instinct to be that power in the soul by which it employs materials and co-ordinates them in a definite manner, without any consciousness or knowledge, on the part of this agent, of the materials employed in accomplishing the end to which its action tends. in embryonic development, the animal formed is constructed instinctively and unconsciously on the part of the agent or artificer concerned in its production. After the birth of the animal, however, the instinctive powers, which had operated unconsciously prior to this time, extend their operations to the preservation of the young animal; but these acts are not now purely instinctive: they are then supplemented by the higher, conscious operations of the soul, which are developed through the sense-organs of the body. Thus the beaver in building its dam is guided by the sense of sight in

the selection of the materials necessary to its accomplishment. The squirrel also is guided by its visual perceptions in collecting the food for the approaching winter. Likewise the bee, actuated by an internal and unconscious impulse, as soon as it is liberated from the egg, is directed by the sense of sight while selecting the honey from flower to flower, and also in its attack upon its enemies. The soul, then, in building the body and in carrying on the functions of organic life, acts purely instinctively; while in the examples just referred to in regard to its later movements, the animal, in selecting its food and in its protection from the attack of its enemies, is, in its internal, instinctive impulses, aided and supplemented by the sense of feeling, sight, hearing, etc., which constitute the necessary basis of all intelligence. There is, therefore, a blending of the purely instinctive operations with the rising intelligence governing the movements of the animal. This blending of the conscious and unconscious acts of the soul may be observed to take place from the lowest animal in the scale all the way up to man, in whom instinctive operations become mainly overshadowed and supplemented by concerted acts of intelligence.

The division of the psychical powers into unconscious and conscious operations corresponds with the division of the bodily functions into those of "organic life" and those of "animal life." The former class of psychical powers, like the functions of organic life,

operate, as we have said, instinctively, unconsciously, and unceasingly. Having thus taken a cursory view of these powers in reference to their instinctive nature, let us now proceed to a further consideration of them as unconscious activities. These powers operate unconsciously because, in the normal state of the functions of "organic life," they are unfelt; but in the morbid operations of the cell-functions, as when the psychovital energy is obstructed or essentially retarded, these movements give rise to feelings of uneasiness and, sometimes, to a sense of chilliness, general malaise, and pain. The unconscious powers of the soul are, therefore, immediately known and felt only as morbid manifestations, while the conscious powers are best known and studied in their normal operations. The soul, then, in connection with the vital principle, not only builds the organism, but in connection with the vital functions of cells serves likewise as a constant sentinel to warn us of any real danger that may rise in consequence of a disturbance of the cell-functions. That these morbid sensations, arising from the various disturbances of the cell functions, are purely psychical sensations, is evident from the fact that nothing can feel but the sentient principle; and hence it is this principle that is disturbed in its operations when morbid sensations arise. As the unconscious powers of the psychical agent differentiate their operations in the formation and functions of each tissue and organ, so these morbid sensations are found to differ according to the different

tissues affected. Hence we have certain painful sensations which are peculiar to diseases of the nervous system, and a distinct class of sensations attending disease of the muscular system, and still another peculiar to disturbances of the mucous tissue, and vet others denoting disease of the osseous tissue; while there is a distinct order of painful feelings attending disease of the different glandular organs of the body, and still another pertaining to lancinating pains attending inflammation of the serous membranes. These facts all tend to confirm our views in regard to the innate and instinctive relation of the soul to the vital principle of the cells, and through them to all the different parts and functions of organic life. In health these powers operate unconsciously, because they are unfelt, while in disease they are disturbed or perverted in their action; hence they give rise to those feelings of uneasiness which constitute the morbid sensations of "organic life."

We become conscious of the higher operations of the soul only through the sense-organs of the body, as when these are present and their functions normal. On the other hand, we are made conscious of the purely instinctive or lower operations of the soul only through the cells which compose the different tissues of our bodily organs, as when their functions are abnormally disturbed. Not that the disease itself is in the soul, but in the cells, as when the latter are not receiving a sufficient or healthy supply of nutrient material from

the blood, or when injured by some poisonous agent that may tend to disturb the action of the psycho-vital force operating within the cells. As has been remarked, if the soul is connected with the organism at all, it must be by means of certain laws, which in health operate smoothly, silently, instinctively, and unconsciously, but when this class of laws belonging to the sentient principle is obstructed or essentially disturbed by disease, the effect becomes, as it were, grating and painful, thus furnishing the physician with the best means of diagnosing the different forms of disease. If the sentient principle, which alone feels pain, were not intimately connected with all the different functions of organic life, it would not stand as the ready sentinel to signal pain whenever the functions of the different organs are disturbed. Upon no other principle can we form a true theory of pain but upon the thèory that the psychical powers are concerned in the performance of cell-functions, and are awake to all their disturbing influences.

We have stated that the psychical powers, which act in connection with the vital principle in the formation of the organism and in the performance of the different cell-functions, are instinctive, unconscious, and unceasing in their operations; and, 'having considered them in reference to the two former, we shall now consider them in reference to the latter. That these powers are unceasing in their operations will appear evident from the fact that they neither intermit nor terminate their

activities, except at the cessation of the vital functions; and these functions do not cease their action until the connection between the soul and the body terminates; for as long as the body retains the soul, the powers of life will continue to operate. Accordingly as the vitalized ovule-cell was not capable of forming the organism until after it had been fecundated or re-enforced by the addition of the psychical principle, so upon the withdrawal of this principle from the cells of the organism the vital operations at once and forever terminate their action; for the body without the soul is dead. Hence, if the body without the soul is dead—i. e., loses its functions—the soul must be intimately concerned with the operation of those functions.

Inasmuch as the human organism is composed of numerous and widely different tissues and organs, each of which is capable of performing a separate function from the other, and yet all contributing to the welfare of the whole body, it is evident that the principle, whatever it may be, that forms the body and maintains its varied functions, must be one of a differentiating kind one that is capable of exerting different powers suited to the formation of the different organs, and to the maintenance of their respective functions. That the vital principle has no such differentiating power as is manifested in the numerous bodily functions, would appear evident from the fact that this principle, when existing alone, as in the unfecundated cell, can neither multiply cells nor form tissue, without which there can

be no performance of cell functions. As we have stated, the body without the soul is dead; so the only agent of which we have any knowledge that is capable at the same moment of exerting different powers is the psychical principle. That this principle is capable of differentiating its powers, is evident from the different powers manifested by the numerous faculties of intelligence, such as seeing, hearing, feeling, perception, memory, will, etc. These powers are so distinctive in their character, that no one of them can perform the office of the other—the eye can not hear, nor the ear see, neither can any one of the foregoing percipient powers perform the office of the will power. If the psychical principle is capable of differentiating its conscious operations into faculties of intelligence corresponding with the different phenomena of the world around it, why not the unconscious powers differentiate their operations so as to correspond, as a causal energy, with the different organs of the body and with their respective cell functions, thus forming by its union with the vital principle of the cells of the different organs what may be called a Vital Faculty, or vital group of faculties? As the conscious powers of the soul differentiate into the mental group of faculties, so the unconscious operations may be said to differentiate into a vital group of powers, suited to the different organs and functions of "organic life." As Mr. Addison has well observed (Spectator, No. 600), "What we call the faculties of the soul are only the different ways or modes in which the soul can exert herself." Accordingly, we would define the unconscious powers of the soul, which operate in connection with the vital principle in the performance of the various functions of organic life, the Vital Faculties, or, in the language of Addison, the different ways or modes in which the soul is capable of exerting itself.

As the conscious powers require certain organs for their manifestations and development, so the unconscious powers, being primary, form the requisite organs suited to the development of the lower class of functions. The conscious and the unconscious psychical powers are always found to preserve a corresponding parallelism towards each other. The latter, as an instinctive class. constructs the organs necessary to the development and exercise of the former. If one class of the psychical powers is capable of making use of the organs of the body when formed, where is the inconsistency of conceiving another class of psychical powers capable of forming the organs? In every instance we find only such organs formed as the conscious powers of the animal require. For example, if we descend to the bottom of the animal scale, where there is no power in the animal to see or hear, there is formed neither eye nor ear. But in ascending the scale, wherever there is a psychical power added to a species, there is forthwith an organ formed suited to its manifestation. in all cases the body is formed to suit the requirements and wants of the psychical occupant. The organs of each animal are in every instance differentiated by the unconscious, instinctive powers of the psychical agent to suit the conscious powers of the animal. In perfect accordance with these adaptations, we find the claws of the eagle are best suited to the wants of its psychical nature. The paws and teeth of the lion are best adapted to his ferocious character; while the hands of man are adapted only to the psychical requirements of man. So perfectly do the laws of the soul operate in furnishing organs to suit its own conscious, psychical requirements, that a want of adaptation in this respect is rarely witnessed in any part of the animal kingdom.

If the soul did not form the body, we should be under the necessity of supposing that another agent formed it, differentiating the organs in every instance to suit the differentiation of the psychical powers of each animal belonging to the different species. Considered in this light, the soul, having no causal relation to the body, must, when the latter is fully formed, or while it is forming, make a forcible entry into it, occupying it as a tenement just so long as the agent that formed it is capable of maintaining it in suitable repair. On the other hand, it is much more rational to conclude that the soul participates in the formation of the body, occupies it as a tenement, and makes use of it as an instrumentality. If it has a certain class of powers by which it can use the body, has it not a certain class by which it can form it?

It may be considered a wise provision, indeed, that the soul is not consciously connected with the vital functions of the body, except when these are interfered with by disease; for could we feel the action of the heart at each throb, and the beating of every artery in the body, together with the secretory action of these untold millions of cells which compose the glandular structures of the various parts of the organism, the subjective sensations arising from these causes would so engross the attention of the mind as to render our whole life miserable, if not altogether insupportable. To avoid disturbances of this kind, a certain class of the powers of the soul are endowed with unconscious powers of action, so as to operate entirely unfelt, while another class are left free and undisturbed in their conscious exercises.

The body is so formed as to serve, not only as a suitable tenement for the soul, but likewise as a ready instrumentality for the performance of its numerous requirements. All the functions of organic life are carried on by the psycho-vital powers, which operate with greatest energy at the center of each cell; and the cells of the different tissues have been so differentiated as to suit the requisite functions of each part of the organic structure. It matters not whether it is the work of forming a new cell to take the place of one that has just been retired on account of its wornout condition, or whether it is the work of the various secretions of the different organs of the body, or for carrying on the still higher acts of perception and intelligence,—all the various functions of the body are performed by cells especially formed for these several purposes. Thus we have

transparent cells formed in the retina for the ready reception of the light in the performance of visual perception; cells formed in the auditory nerves adapted to the vibrations of the acoustic waves that enter the ear; cells formed in the olfactory nerves for the speedy reception or taking up of the odorous particles that pervade the atmosphere; cells formed in the lingual nerves which are perfectly adapted to the ready admission of flavoring particles that may come in contact with the tongue to aid in the performance of the sense of taste; and cells formed in the nervous papillæ of the hand adapted to the gentle pressure of the fingers in the performance of tactile sensibility. Likewise we have cells formed in certain parts of the nervous system for the performance of muscular motions. Thus the unconscious, involuntary powers of the soul form cells, which are decomposed by the will-power, so as to set at liberty a subtle, chemical agent, which, following the voluntary nerves to the muscles, results in the action of the muscles under the control of the will. By this means the functions of organic life prepare the necessary material for the performance of the operations of conscious or "animal life." The chemical agents contained in certain cells are thus made to serve as corporeal correlates of the will. The conscious powers of the soul, therefore, depend upon the faithful performance of its instinctive, unconscious operations. Without the performance of the first class of psychical powers, the conscious powers would fail to make their appearance.

There is still another class of cells, as the ovule cells, which we have seen are necessary for the reproduction and continuance of the species. The body is thus formed in all respects to subserve the wants and requirements of the psychical occupant that formed it.

Of all the different agents or principles found in the body, it is the personal soul only that bears evidence of transmission from parents to offspring. The body itself is not, properly speaking, hereditary; for the particles which compose it are collected from the scattered elements of the world; but the Power that formed it is hereditary, and so builds the body to conform closely to the likeness, character, and predisposition of the parents to which the individual owes his existence, both soul and body—to the soul directly, and to the body indirectly. It is to the unconscious, instinctive powers of the soul that we are indebted for the stamina or longevity, as well as for all that is implied in the technical phrase, vis medicatrix natura, pertaining to every living organism. Assimilation and disassimilation are incessantly carried on from moment to moment, whether awake or asleep. The unconscious powers perform the work of assimilation, while the conscious operations, as in the case of the will-power, are exerted in the decomposition of motor cells, to subserve the purposes of the soul in carrying on the locomotive movements of the body from place to place. As the supply in health must always equal the demand, assimilation and disassimilation-nutrition and waste-are more nearly balanced

at that period of life when the energies and requirements of the soul in reference to the agents employed in the use of the body are greatest.

Suited to the different requirements of the body, each organ is endowed with a special function, and, as we have said, with a separate and distinct latent sensibility, which becomes aroused to a conscious recognition whenever the psycho-vital functions of any of the organs are seriously disturbed or obstructed in their functions. It is on account of the relation of the powers of the soul to the different organs, that every organ has its own peculiar susceptibility to be influenced or affected by certain therapeutic agents, when these are dissolved in the circulating current of the blood. a medicinal agent may pass through different organs of the body without exciting any perceptible effect upon their functions until it reaches the organ whose latent sensibility becomes therapeutically influenced by its presence. These hitherto mysterious facts find their most ready and satisfactory explanation by the admission that there is a sentient principle which builds the body, and operates in health unconsciously in the secreting cells of the different organs. This class of powers is therefore excited to organic sensibility when the differentiated energies of the soul in the several organs are influenced by the presence of some special therapeutic agent in the blood. Each one of the internal organs of the body, like the different sense organs, has its own peculiar adaptation to certain stimuli; just

as light may affect the optic nerve in visual perception without arousing the latent organic sensibility of any of the other nerves of the eye, except in those instances where the light is intense, or where the organ is inflamed. In the latter case the latent, organic sensibility is often aroused to a painful degree. As the auditory nerve is only adapted to sound, so likewise the different secretory organs of the body may each become affected by certain stimuli in the blood without our being conscious of their presence, except when the organ is deleteriously influenced or injured by the poisonous effect of certain agents, in which case it may give rise to intense pain. But in all cases of inflammation of a separate organ or tissue, the pain caused by a disturbance of its natural function will be found to differentiate in character so as to correspond distinctively with the nature of the tissue affected, agreeing in this respect with the differentiation of the formative principle or psychovital force acting within it.

We are led to conclude from facts like these that the sentient principle is a leading factor in the construction of the body, and in the maintenance of its different functions; that it is present in every part, and that, for the most part, it operates insensibly in the organs of "organic life," but acts sentiently and consciously in the organs of "animal life." If the soul by one class of its powers builds the body, and so differentiates the parts of each animal organism to suit the requirements and wants of its own conscious life, it must for like

reason be capable of differentiating the whole animal kingdom into genera and species. It must differentiate the structure of the numerous tribes, so as to suit the psychical requirements of each species. And as the psychical manifestations are found to differ in all the departments of the animal kingdom, so the structure of each species is observed to differ in strict accordance with the requirements and wants of the indwelling agent that builds each individual structure as a suitable tenement for its own habitation and use.

Viewed in the light of the foregoing, we are indebted to the psychical principle, not only for everything that pertains to our own special psychology, but also for all that belongs to the great domain of comparative anatomy, comparative physiology, and comparative psychology. We are therefore indebted to this sentient agent for all the different orders of the animal kingdom; for everything that pertains to their anatomy, their physiology, and their psychology. Every anatomical structure, every physiological movement, and every psychological manifestation, is the exclusive product of some individual soul, either man or animal. There is no general law in the universe capable of producing a single physiological action or psychical manifesta-Accordingly, every anatomical structure, every physiological action, every psychical manifestation, observed anywhere, pertains to an individual organism, and may be traced back directly or indirectly to a special act of fecundation. Each fecundating principle

among the different tribes seems to be capable of forming a structure and performing functions suited to its own special grade of intelligence from the lowest order of animated beings to the highest animal in the scale.

All the facts which we have thus far advanced in support of our views in regard to the formation of the body, tend to strengthen the position announced at the outset, that the "formative principle" which co-ordinates the structure of each animal, is furnished at the fecundation of the germ; that it is an hereditary principle; that it is a sentient principle; that it unites with the vital principle in the formation of cells; that it is an instinctive principle; that it is a co-ordinating principle; and that it is a differentiating principle, as seen in its differentiating powers manifested by the numerous faculties of intelligence. For, if its conscious powers are capable of differentiating into distinct faculties of intelligence, why not the unconscious powers be capable of differentiating the parts to suit the functions necessary to the support of its living tenement? We have seen that the vital principle alone is not capable of multiplying cells from the germ cell, and co-ordinating them into tissue. Hence we know of no other principle which possesses differentiating powers, but the psychical.

## Section II. Fecundation indispensable to the perpetuation of the vegetable kingdom.

Let us now direct our attention for a short time to the only remaining class of living structures with

which we are acquainted; viz., the vegetable. we shall find, as in the case of the animal kingdom, that the artificer which builds up the structure of each plant is furnished to the germ-cell by the process of fecundation, which process, like the animal germ, requires the direct contact of the sexual cells of the plants for its accomplishment; for, as in the case of the animal, it is not till after fecundation has taken place that the germ-cell of the plant begins to absorb nutrient material from the elements of the inorganic kingdom, by which cells are multiplied in the germination of the plant from the seed. As first stated, as the multiplication of cells takes place, they are co-ordinated into the growth of the structure of the plant; and, as in the case of the germ-cell of the animal, so in regard to the germ of the plant, the germ-cell must be in a vitalized condition before it can be fecundated by the male flower; for, as already stated in regard to the animal germ, a dead cell can not be fecundated. This will serve to confirm the truth of the former statement, that the fecundating principle is not the vital principle, and the psychical principle and vital principle must unite in the germ before the vegetating process can take place. Aristotle was the first, I believe, to advocate the doctrine that there is a vegetable soul as well as an animal soul, and that, as in the case of the animal, so in regard to the vegetable, the vegetable soul governs the growth of the plant. It not only co-ordinates the growth of each plant, but likewise differentiates the

vegetable kingdom into species, and, as in the case of the animal kingdom, maintains the stability of the vegetable species from age to age.

There is, likewise, in the growth of the vegetable an instinctive principle present which directs the formation of the plant, similar to that which we find taking place in the growth of animals. In proof of the similarity of the two principles here alluded to, the instinctive agency concerned in the growth of the plant frequently shows unmistakable signs of sensibility cropping out, as seen in the case of the Mimosa, or sensitive plant, thus showing conclusively the sentient nature of the principle that forms the vegetable structures. If, indeed, we descend to the lowest point of the animal scale, we shall there find only instinct and sensibility cropping out. At this point, therefore, the two kingdoms of nature are so closely allied to each other that it is often difficult for the naturalist to distinguish one from the other. Perhaps the best definition that has been given to distinguish the plant from the animal is that which was given by Linnæus: "Plants live and grow;" "Animals live, grow, and feel." It is only as we ascend from the lowest point in the animal scale that we see a gradual advancement in regard to the sentient principle from that of mere sensibility up to the highest order of intellectual attainment, as observed in man. There is undoubtedly a great similarity existing between the vital agents concerned in the production of both animals and plants.

will appear more striking when we consider that the growth of both proceeds alike from the formation of cells, and when we consider the fact that the vital operations in the plant serve rather the purpose of a necessary food-producer for the support of the animal kingdom. In the plant, the organic elements are raised to their first degree of vitalization for the supply of food required for the existence of the animal races. In this respect many of the lower races of animals appear to serve, in a great measure, simply as food-producers for the higher orders. Inasmuch, then, as instinct and sensibility are found in the plant, as well as in the animal, it is but reasonable to conclude that the co-ordinating principle is similar in both, and that the difference between them is more a difference in degree than one of kind. In like manner we find the co-ordinating principle among the different animal races to be one of degree rather than one of a wholly-distinct nature. Inasmuch, therefore, as the animal organization can not be maintained without the vegetable, and inasmuch as both are formed by the operations of life, beginning at the fecundation of the germ-cell, there must be a very close causal relation existing between them in regard to the principle that co-ordinates the two structures. Thus like powers proceed from like causes.

But we must here digress a little to consider some questions which have been supposed to present insurmountable difficulties in regard to the connection of

the soul with the body. Proceeding on purely metaphysical grounds, the metaphysician will ask, How can the immaterial, non-extended soul, which is supposed to have no properties in common with matter-that which is believed to be destitute of the property of extension—how can it form a union with the extended, so as to occupy the entire body—the parts as well as the whole—in such a manner as would be requisite and necessary in order for the soul to form the body, acting and working in each part as well as in the whole? We stated in the outset of our remarks that the soul has no properties by which it can form a direct relation and connection with lifeless matter; that it has no properties of its own by which it can unite with the body except through the agency of a vital link, connecting it with each and every cell of which the body is composed. It is a well-known fact that whenever the vital link connecting the soul with one of the cells is severed, the disconnected cell is thrown off from the body as dead; so whenever the connection of the soul with all the cells is severed, as in death, the soul loses its relation to the whole body, and all the vital functions upon which that connection directly depended immediately and forever cease to operate; for the body without the soul is dead. In order, then, to bridge over the seeming difficulty of two diverse entities—one extended and the other non-extended—each being possessed of properties totally unlike the other, and yet uniting together as in the living body, Descartes held

that, in animals, the soul was connected with the body only at a single point, which point, he maintained, was the pineal gland—a small prominence of nerve-substance situated near the central part of the base of the brain. As the essence of matter, according to Descartes, is extension, and the essence of mind is thought, he supposed that there could be no union between such diverse entities as these; hence all intercourse between the soul and the body must be carried on at a single point of the latter; or, as Leibnitz taught, by a preestablished harmony existing between the operations of the body on the one side and the operations of mind on the other; or again, as Malebranche, who was himself a Cartesian, affirmed, that all intercourse between the soul and the body was carried on by the direct agency of the Deity. Since the time of Descartes philosophers and physiologists have extended this point of connection somewhat by extending the operations of the mind to the whole brain, but allowing no immediate connection beyond this organ with other parts of the body, except by means of nerve-cords for the transmission of impressions to the brain, and for the transmission of volitions to the muscles. Dr. Carpenter locates the seat of consciousness at the special nerve-centers, which are situated at the base of the brain. this point, it is alleged by physiologists generally that the soul or mind has no immediate or known connection with the lower parts of the body, except as it is carried on by means of nerve-cords connecting the

brain and mind with all other parts of the organism. It is claimed by physiologists that the soul or mind is not present at the outer extremities of the nerves of the body, but that its immediate presence is limited to the cerebral extremities of the nerves, where it is claimed by them that all our perceptions take place. As the sentient principle, according to this hypothesis, is not present in the outer extremities of the nerves, and as the act of perception can take place only where the mind is present, it is limited to the brain, and not in the external organs of sense. Claiming that the soul is limited in all its acts to the brain, the philosophers and physiologists maintain that external objects produce impressions upon the outer extremities, or senses, which impressions are transmitted along the course of the nerve-cords to the brain, and are there perceived by the mind. For instance, in vision we do not perceive objects directly, say the philosophers; but how, it may be asked, can external objects be depicted and represented in light and its delicate colors by the nerve in the dark chamber of the cranium—the supposed seat of the soul—where it is utterly impossible for light and colors to penetrate through the small foramen through which the optic nerve enters the opaque structure of the cranium before reaching the brain and mind? Taking the common supposition that the mind resides exclusively in the brain, we are forced to the conclusion that we do not perceive external objects on the retina, where they are represented in pic-

tures of light, but that light and colors are perceived within the dark chamber of the cranium, where neither light nor colors can have any existence whatever. parity of reasoning, it is claimed by the advocates of this theory that we do not hear sound in the external ear, but at the ganglionic center, near the medulla oblongata, where the auditory nerves terminate. point, where the brain connects with the spinal column, it is evident that no sound exists, except, perhaps, the throbbing of arteries; and even these, in the normal state of the circulation, are not heard. In accordance with these views, it is claimed by modern theorists, that these nerve-centers are the true and only seat of our sensations and conscious perceptions. What we have said of sight and hearing may, mutatis mutandis, be said of the remaining organs of sense. According to the theory of perception herein presented and generally maintained, we do not perceive the external world immediately. We perceive nothing but certain impressions made on the outer extremities of the nerves of sense, which impressions are conveyed by these nerves to the seat of the soul. According to this very prevalent theory of perception, we do not perceive the external world at all; we perceive only certain physiological phantasms, or impressions of the center of our nervous system. If we perceive nothing exterior to the center of the nervous system, and at this point can perceive only "impressions," the existence of an external world can not be established beyond mere conjecture. Such is the dilemma in regard to the philosophy of perception to which the advocates of this theory are driven in attempting to restrict the action of the mind solely to the ganglionic centers of the brain.

Those who maintain that the psychical powers are limited to the brain and cavity of the cranium, the mind being separated from the phenomena of the world by the length of the nerve-cords, are forced to take refuge in one or other of the forms of idealism which agitated the philosophical world during the early part of the present century. The advocates of the theory that the soul is limited to the brain have based a system of idealism upon the supposed functions of the nervous system. Upon the attempt thus to limit the operations of the soul to certain parts of the body, Sir William Hamilton has very truly remarked that those who hold that the soul is connected with the body only at a single point simply increase the difficulty which they had intended to avert. The difficulty, says he, is not less by supposing that the non-extended soul is connected only to a certain part than by the view that it is connected with every part. In his strictures upon this point, Sir Wm. Hamilton, who was undoubtedly the most erudite metaphysician of the present century, indorses the views of Aristotle, "that the soul occupies the whole body, and that it matters little whether we say the soul contains the body or the body contains the soul." \* It is very evident that the soul

<sup>\*</sup>Sir William Hamilton's lectures on "Metaphysics," pp. 271-358, et al.

could not make use of the body unless it was in some way connected with it; and if it must be connected with it in some part, why not with every part? There is no more difficulty arising from the supposition that the soul is connected with every cell than there is in the supposition that it is connected with but one cell.

Having made this digression to notice some of the difficulties arising from the supposition that the soul is directly united only to some favored or particular part of the organism, or to a single point, as the case may be, let us return to the question, How can the immaterial, non-extended soul unite with matter so as to occupy every part of the extended organism? We have already stated that the psychical principle has no direct relation with the molecules of matter, except where these are vitalized by the living principle. establish a connection between the soul and the body, there must be a direct relation and affiliation between the psychical principle and the vital principle contained in the cells of the body. That there is a separate vital principle capable of entering into an immediate relation with the molecules of the cell is evident from the well-known fact that the blood-corpuscles show signs of life after having been drawn from the veins, and even after the blood has been frozen. It is evident, therefore, that there are two distinct agents existing in the living body: the vital principle, which exists in certain cells before they are taken up into the tissue, and the psychical principle, which can manifest itself only

in a living, organized structure after the tissues have been formed. We say, in a living, organized structure; for the psychical principle, unlike the vital, can show no signs whatever of its presence in the blood-corpuscles. It is only after the body is formed, and when in connection with the vital agent, that the psychical principle can manifest itself and hold a relation with the body. In every living creature these agents are first brought together in the germ-cell by the process of fecundation. A dead cell can not be fecundated, nor can a living cell unfecundated multiply into other cells by division of its contents. The vital principle, when acting in a separate capacity, can form a cell-corpuscle de novo in the blood; the psychical principle can not. But when these agents are once united together in the germ, in which their separate powers are blended together, they can then, and not till then, form tissue from the vitalized plasm of the blood, and arrange the different tissues into a complex, organic form. vital principle is not the co-ordinating force that gives form to the physical structure. This power belongs to the psychical agent, whose use alone the living tenement is destined to subserve. The vital principle alone can not form tissue, nor the psychical alone form cells; but when their powers are united together, as in fecundation, they can readily form both. The power that forms the body, then, is not simple, but compound. We have therefore denominated the "formative principle" of the body psycho-vital force.

to the union of these principles, the psychical principle is a simple, non-extended entity; but after its union with the vital principle it is compound, consisting of two entities. By this union the physical principle acquires the property of extension on account of its uniting with an agent having a relation to matter; it acquires one of the properties of matter—a property permanent in material entities, but accidental in regard The soul obtains two coverings by its to the soul. union with the cells of the body: the vital and the The latter is thrown off at the death of the structure. The former remains permanently united with the psychical. But more of this anon. Indeed, we may say that a somewhat similar separation takes place continually, but upon a smaller scale, as when cells lose their connection with the vital force and are immediately carried out of the body; but these are soon replaced by the continual process of assimilation.

When fecundation takes place, the impersonal psychical contained in the germ-cells of the parents unite into one on account of the merging of the cell-contents together. The personal soul is thus formed by the merging of the plasmic contents of the two cells into, as it were, the smallest point of matter. But as the fecundated cell soon divides in the middle into two, the vital agents that divide it remain within the liquid contents of the two daughter-cells, and divide these in turn by similar process into four, and these again into eight, and so on until the whole body is

formed by the extension of the principles that divided the first cell. Thus the soul, by uniting with the extended, becomes itself extended, taking form and developing in power as the body is formed. It is not till the body is completed in its formation that the remaining powers, as the mental, take their rise through the gradual exercise of the senses. As the psycho-vital powers form tissue, the extension of these forces go on pari passu with the extension of the tissues. But the psychical agent, by its gradual extension, in uniting cell to cell with the vital, acquires only one of the properties of matter; viz., extension. This property, accidentally acquired by its union with the vital principle, is unaccompanied by the law of impenetrability; for the vital agent, not possessing such a property itself, can not confer it upon another, so as to clothe the soul with the remaining properties of matter. the cells may be subject to division, on account of the law of impenetrability which pertains to the particles of matter, the "formative principle," as a causal energy, is not thus subject to mutilation and parceling out as in case of the former. In the amputation of a limb the surgeon only separates the cells that compose the limb from each other and from their causal energies without necessarily destroying those energies. the soul is separated from the whole body, or from a part of it, it can not build for itself another body, nor build another limb. To form for itself a body, it must, in every case, begin ab ovo, and develop with the body

from the fecundated egg. Neither can the soul, in building the body, abandon its work to go back and start anew. The operations of life proceed, by a gradual evolution of powers, from a simple cell to the complex structure of the animal. When the breach of continuity, however, is not great, it may extend its operations so as to pick up the work which has been disturbed or interfered with, and restore the part injured; but in taking up the extra work it can not abandon with impunity the work of other parts of the organism. regard to the law of impenetrability, it may be said that matter is impenetrable to matter only, while spirit is impenetrable only to spirit. Impenetrability is the power a body possesses of filling space to the exclusion of another of like properties. The soul, not having this property of matter, does not displace the body; and, for like reasons, the body does not displace the soul. The soul acts in a causal relation to the body, so that the arrangement of the particles of the latter is the effect of the operations of one class of the psychical laws, as the unconscious, instinctive. The soul exists in connection with the body, then, as cause; the body and its physiological functions are the effects of this cause. When the surgeon applies his knife in the amputation of a limb, the knife divides the structure of which the limb is composed, because the law of impenetrability exists between the surgeon's knife and. the limb; but the knife, for the want of such relation to the cause, can not dismember the soul. It only removes the physiological effect from the cause, and renders the latter inoperative by removing the cells in which alone the causal energies were operative. The soul exists in the personal form of the body. We do not rest simply upon speculation alone in making this statement, but we expect to demonstrate this fact presently by the generally admitted and unshaken foundations of science (by such data as we are compelled to resort to in demonstrating the form of the body), for we expect to conduct the reader to certain portals of the soul which have been strangely neglected and almost entirely unexplored.

The powers of the soul unfold by a gradual process of evolution, beginning its individuality and personal life in the fecundated cell. Its first act in the cell is to cause an increase of the contents of the cell by the imbibition of vitalized, nutrient material which is supplied from the living plasm of the blood. Being thus supplied with the principles of life and matter from the world, it constructs a body suited to its own use and requirements, which is formed out of these materials by a gradual process of evolution. If the soul exists as a real entity—and that it does, no one can seriously call in question—how is this principle or entity supplied in the process of its own development from a mere point on the germ-cell to its full completion as a personal, psychical being? At the first moment of its existence the personal soul receives a lodgment in a mere point or dot of the germ-cell, having only an in-

stinctive energy in the first place, but gradually acquiring form, dimension, and powers of intelligence as it advances towards maturity. Beginning, therefore, with the manifestations of instinct only, the soul gradually and ultimately acquires powers of intelligence and reasoning. The former exists in the first place actually, the others only potentially, but become actual in their existence through the exercise of the bodily senses. The body develops from a germ-cell by the gradual unfolding of its structure. In like manner, the soul unfolds its powers by a similar process of evolution. The soul, therefore, has a beginning as well as the body. It must, like the body, receive an adequate support in order to supply the psychic principle to the untold millions of men and animals which have from time to time existed upon the surface of the globe, all possessing a sentient existence, but with variable degrees of intelligence.

To supply this want, "there is," says Mons. Quesne, "a fluid diffused throughout all nature, animating equally all living and organized beings. . . . The difference which appears in their multiplied actions comes of their particular organization." He holds that, while the body dies, the fluid does not; the organization perishes, but not the psychical fluid. This principle believed to exist in nature has received the name of *Psychism\** from its supposed nature and relation to

<sup>\*</sup>See this term in Fleming's "Vocabulary of Philosophy;" see also Webster's Unabridged Dictionary.

the soul. The vital principle, on account of its relation to the molecules of matter, may be said, in a somewhat general sense, to take the place of the anima mundi. the life of the world, as taught by the ancients; but the psychical principle, not being directly allied to matter, is, in the different animal organizations, preeminently individual, special, and, in man, personal. It is but reasonable to conclude that this fluid is taken up in the development of the soul from a psychical germ in like manner as the vital fluid is taken up from the nutrient materials during the growth of the tissue. It is only the germinal principle that is transmitted from parents to the germ-cell, and not the soul in its maturity. The latter is developed by a regular process of evolution pari passu with the development of the body. In building the body, the psychical principle differentiates all the numerous cells to suit their respective functions and use in the organic structure. But the reproductive cells are not formed until after the soul itself has attained to a considerable degree of maturity. To suit the requirements of these cells, it supplies them with the necessary germinal elements (psychical principle), which it eliminates from itself, as the true type of its own nature and character. These impersonal principles furnished by the reproductive cells of the different sex unite together in the fecundated cell to form a personal soul of their lineal descendants, or offspring. As the body is in every instance the true outward expression of the soul that

formed it, so, in man, the body is formed to suit the psychical powers that pertain to man; while in the lower animals such bodies are formed as will best suit the psychical requirements of the respective species. Hence in each case the evolution of the body is in strict accordance with the involution of the powers of the soul that forms it. The infoldment of the indwelling spiritual principle corresponds, therefore, in each case, with the unfolding process of the bodily structure, be it man or animal.

With these general remarks, let us now briefly outline the operations of the psychical agent in the development of the embryo from the germ. "Besides the material substance of which the body is constructed," says Agassiz, "there is an immaterial principle, which, though it eludes detection, is none the less real, and to which we are constantly obliged to recur in considering the phenomena of life. It originates with the body, and is developed with it, while yet it is totally apart from it. . . . The constancy of species is a phenomenon depending on the immaterial nature. Animals, and plants also, produce their kind generation after generation. We shall hereafter show that all animals may be traced back, in the embryo, to a mere point on the volk of the egg, bearing no resemblance whatever to the future animal. But even here an immaterial principle, which no external influence can prevent or modify, is present, and determines its future form, so that the egg of the hen can produce nothing but a chicken, and the egg of the cod-fish produces only the cod. It may therefore be said of a truth that the chicken and the cod exist in the egg before their formation." "Perception," says he, "is a faculty springing from this principle." \* According to Agassiz, there is a spiritual principle which resides in the germ of every animal and is in some manner connected with the vital processes, developing to maturity with each animal organization. Every physiological action which comes to our notice, either in the vegetable or animal kingdom, is connected with this principle, and is limited to individual organisms. There is, therefore, no general physiological action to be found in either of the kingdoms of nature. All the operations of life are the result of a separate and individual spiritual agency which we have denominated the "psychical principle." In the formation of the body, this principle is co-operative with the vital principle.

Having shown that the personal soul is formed in the germ-cell by the process of fecundation, and having likewise divided its powers into two fundamental classes, viz., the unconscious and the conscious, the former, being concerned in the operations of organic life, pertain to physiology; the latter, developing as the mental powers, pertain to philosophy. Beginning, then, with the fecundated ovum, let us now trace the operations of the former class in the development of the embryo. The first most striking change

<sup>\*&</sup>quot;Principles of Zoology," by Agassiz and Gould, p. 43.

observed to take place in the fecundated egg is the segmentation of the volk and its formation into cells that are destined to enter into the structure of the animal whose formation is about to take place. As cells are produced, they are immediately co-ordinated by the psychical or "formative principle" into tissue. The arrangement of tissue is in strict accordance with the plan of the structure of the forthcoming animal, which plan of structure in all cases accords with the wants and requirements of the psychical agent that forms it. In the higher order of animals we are presented at a very early stage of the development of the embryo with cells which are co-ordinated into three membranous layers: an outer one, an inner one, and a middle layer, called blastodermic membranes. next step in the process is the formation of a straight line, or furrow, midway upon the external surface of the outer membrane, which furrow deepens until it becomes completely buried in the mass of cells that are deposited upon the external layer. As the outer membrane thickens, this furrow becomes completely inclosed in its whole length by the upper edges of the furrow coming into contact and forming a union with each other, thus changing the simple furrow into an inclosed cavity. At one end of this furrow-now an inclosed cavity—an enlargement is observed to take place, which is destined to receive the brain and give form to the head of the young animal. In the two cavities formed by a partial diversion of this furrowed

line the brain and spinal marrow are lodged. The brain and spinal marrow are formed by an arrangement of nerve-cells which are, in the first place, a little larger than the mature nerve-cells, but are finally condensed into cells of the ordinary size. Both in man and in the lower animals, as nerve-cells are formed, they are differentiated and co-ordinated into numerous parts, each tissue and part having a distinct office to perform, suited in every respect to the different powers of the psychical agent that forms it. Thus, in all the tribes of animals, the primary, instinctive, and unconscious powers of the soul are essentially necessary to the formation of just such organs as are requisite for the development and exercise of the conscious operations of the soul; for without suitable organs, such as the sense-organs, there could be no development of intelligence. it is essentially necessary that instinctive powers should exist in the soul in order that the latter may accomplish its own destiny in life. But to return. The first marking, or furrowing, of the outer membrane, and its subsequent division into suitable cavities for the lodgment of the brain and spinal marrow, show that the animal whose formation is commenced will have a spinal column, and that it will, if permitted to develop to completion, take its place, both physically and mentally, among the vertebrated animals. But at this stage of its development it can not be determined from an examination of the germ alone whether the animal forming will develop into a fish, a reptile, a bird, a quadru-

ped, or into a human being. At this stage of development the free and lower edges of the furrowed membrane, following the outer curvature of the contents of the ovule, meet on the opposite side from the furrowed line or cavity, where the free edges meet and unite by cicatrice, thus inclosing the trunk, which subsequently divides into the thoracic and abdominal cavities. From this simple layer of cells, which constitute the outer membrane just referred to, are formed and differentiated all that part of the body known as the organs of "animal life," such as the skeleton, the upper and lower extremities, the muscles, and the nervous system with its different appendages, as the organs of sense, etc. Whilst these changes are taking place in the outer membrane, the inner membrane, which is now inclosed within the sac formed by the outer one, becomes differentiated into the numerous organs of "organic life," such as the stomach, intestines, liver, kidneys, etc., while from the middle layer are formed the heart, lungs, and blood-vessels. The first step taken towards the differentiation of the internal organs is the formation of a separate cell for each organ, which constitutes a distinct center of nutrition. Thus there is an hepatic cell formed for the liver, which is immediately divided and multiplied into numerous other cells of its kind and character. As the cells are formed, they are co-ordinated by the psycho-vital force into the delicate and complex structure of the liver. In like manner renal cells are formed for the kidneys, which, multiplying into others of the kind, result in the formation of these organs; and so of all the other organs of the body. The same power—the same psycho-vital energy—that formed the different organs of the body resides in their cells, and carries on their respective functions from the beginning of life to its close. The different organs, like that of the whole body, continue their growth from childhood to maturity, or until the instinctive psychical powers become balanced in their energies so as to suit all the requirements of nutrition and waste for the normal support of the tissues.

The first differentiated cell which serves as the required starting-point in an organ is not always a perfect, typical cell, such as belongs to the mature state of the This is exemplified in the formation of the fætal skeleton; for the first cells, which serve as the beginning of the latter, are cartilaginous, and take their deposit of lime afterwards. Thus embryonic development proceeds, like the development of the soul from the simple laws of instinct to the highest intelligence, from the most simple form of structure to the most complex structure of the organism. The cells that form the nerve-centers of nutrition are, in the first place, commonly larger than those of the perfect type, but gradually condense, as the development of the nervetissue proceeds, into true, typical nerve-cells. The same remarks are more or less applicable to the formation of other tissue. They become perfected as the embryonic development proceeds. Thus embryonic development

begins with a simple form of cell-structure, and, proceeding onward, ends in the most complex structure of the organism. Like the power that forms it, it begins its operations with a class of simple, instinctive laws, and proceeds onward in its development until it sometimes reaches, by the aid of the organs of the body, the highest order of intelligence. As the body is exceedingly fragile and weak in the first place, but afterwards attains to great power and strength, so the operations of the soul begin in weakness, and, through the aid of the sense-organs which it forms, rises afterwards to extraordinary manifestations of strength and power. We see this mental power manifested, not only in the body, but we also see it exerting an inventive genius to extend this power beyond the organism by devising different mechanical appliances, as supplementing force to aid in carrying on many of the transactions of life.

But to return to the unconscious, instinctive operations. The soul by means of this class of powers forms the different cells for its own use, not only in keeping the various parts of the body in repair, but likewise in the performance of the higher operations of mind in the movement of the parts. The bony fabric serves as the foundation of the animal structure; the muscles serve in the performance of motion. For this purpose there are cells formed which, when decomposed by the will-power acting upon the constituent elements of the cell, furnish the requisite chemical agent as a subtile

force necessary to move the muscles in obedience to the voluntary acts of the mind. There are cells formed for nutrition and separate cells formed for the performance of sensation. To subserve the purpose of visual perception, for instance, there are transparent cells formed in the retina to admit the rays of light to serve the conscious powers of the soul in vision. There are cells formed in the lingual nerves which readily admit flavoring particles, and cells in the olfactory nerves for receiving odorous particles. There are cells formed for respiration; and, lastly, cells formed for the reproduction of the species. Hence all the functions of "animal life," like those of "organic life," are performed by means of cells. All the special sensations accompanying the perceptions of the soul are performed in the nerve-cells of the different sense-organs of the body. Occupying the whole body as its tenement, the soul perceives the phenomena of light and colors in the transparent cells of the retina; it perceives the phenomena of sound in the cells of the auditory nerve distributed within the ear; it perceives odors in the nose and flavors as the flavoring particles are absorbed by the cells in the papillæ of the tongue, and feels tactile sensations by means of cells which have been adapted to suit the gentle pressure made upon the nerve-cells distributed to the fingers' ends. The perceptions thus obtained are, at the time, all colligated by the soul, which for this purpose acts in connection with another part of the nervous system; viz., in the cells which form

the cineritious substance of the brain. Thus we hold that the soul not only builds the body, but carries on the different functions, both of "organic life" and "animal life," performing each distinctive function in a separate and distinct part of the body.

- As the body is constructed entirely for the use of the conscious soul, and as the vital principle has no differentiating nor co-ordinating powers, while the soul has both, we are forced to the conclusion that the unconscious powers of the soul, in connection with the vital principle, build the body and differentiate the tissue into special parts and functions. As evidence that the soul possesses differentiating and co-ordinating powers, we know that its conscious powers are capable of differentiating into numerous faculties of intelligence, and also that it has the power of co-ordinating the thoughts of the mind into logical sequence in the processes of reasoning. The former class of powers then co-ordinate and differentiate the parts of the organism, while the latter co-ordinate the thoughts of the mind into rational sequence. Thus the soul possesses powers of co-ordination as well as powers of differentiation. The following may be presented as a brief summary of the views we have been advocating in regard to the connection of the soul with the body and its relation to the vital principle:
- 1. The germs of all the different races of animals, as well as those of plants, must undergo the fecundating process, either directly or indirectly, before they are

capable of being multiplied into cells for the formation of tissue, both in plants and animals.

- 2. No cell can be fecundated that is not previously and at the time possessed of vitality. Hence the vital principle can not be the true fecundating agent that is added to the germ-cell by this process.
- 3. Every fecundated animal germ, under favoring auspices, develops into an organized being resembling in all respects the same genera and species, the same form and character, both mentally and physically, as that which pertained to the parents that contributed to the germ the powers necessary to the organization of the new being. The same remarks are applicable to the fecundation of the germ of plants, by which they are also enabled to preserve their form, as well as their genera and species, from age to age.
- 4. As all animals bear the relation of parent and offspring, so no one parent can, for an indefinite period, furnish the requisite organizing principle for the production of offspring. It is, however, claimed by some naturalists that a few insect tribes may produce progeny for a short period without the direct aid or influence of the opposite sex. In the higher forms of life there is no such thing as parthenogenesis.
- 5. As the vital principle is the same in the white blood-corpuscles of all animals, and exists in all germs before fecundation takes place, as well as in those innumerable living germs that never undergo the process of fecundation, it can not for this reason be the

true sexual principle furnished to the maternal germ by the process of fecundation.

- 6. If the vital principle can not of itself form tissue and differentiate the tissue into special organs of the body, differentiating also each animal into genera and species, it is clear that the only remaining principle possessing such differentiating power is the *sentient principle*, which is found to differ, not only in every species, but likewise to some extent in each animal, in regard to its special sensibilities and faculties of intelligence.
- 7. As the germs of each species can be fecundated only by one of its own kind of species, the fecundating principle must be, in each case, one of special energy and power. It must preserve the animal kingdom distinctly in all its different classes, orders, genera, species, and family characteristics. If there were not a special influence transmitted from parent to offspring, the present order of nature would at once break up, and utter confusion would inevitably prevail throughout the whole order of living beings. Hence the psychical or sentient principle, possessing, as it does, differentiating powers, and belonging to every animal organization, it must be the true differentiating principle of animal life that is transmitted to the offspring.
- 8. As man is composed of two distinct natures—consisting of a soul or sentient principle and a body—each germ-cell must contain within its vitalized plasmic contents a psychical principle—as a germinal prin-

ciple—derived respectively from both sexes. The maternal ovule contains within it a psychical principle, which is a complete fac-simile or duplicate of all the powers contained potentially in the personal soul of the maternal parent, while the paternal germ-cell contains a like duplicate of the male parent. The psychical principle contained in the opposite sexual cells is of such deficient energy as to be entirely incapable of forming a separate organic structure from the cell which contains it until it has been re-enforced by that of the opposite sex at the moment of fecundation. The personal soul of the offspring, thus procreated and formed, now contains potentially (though modified by the composite blending) all the different psychical characteristics of the two parents, from which it is derived. form the organism, we have therefore only to divide the psychical powers into two classes—the unconscious and the conscious—the latter as yet existing only potentially, while the former, being instinctive and ever active, starts the process of constructing the organism. After the body is formed, the conscious powers begin to develop, so as ultimately to unfold all the combined characteristics of the mental powers belonging to the parents. Could the impersonal, psychical agent, which resides in the ovum before fecundation, form a body from the maternal ovule, the individual thus formed would be in all respects a complete type of the mother alone, both mentally and physically. It is in consequence, therefore, of the combination of the psychical

agents in the cell at fecundation, that the great variety of individuals in the human family depends. Are those faint markings of segmentation sometimes seen in the yolk of the unfecundated egg, the result of these separate, impersonal, psychical powers manifesting an abortive tendency to form an organism? We regard the constitutional and mental powers of each offspring as a product of the varied blending of the opposite, psychical powers of the parents.

- 9. If the psychical agent is in no way connected with the formation of the organism, there would undoubtedly be a frequent want of adaptation between the body and the psychical powers destined for its occupancy and use. If the soul, by its unconscious, instinctive powers, does not build the body, there must be two separate principles added to the germ at fecundation—one for building the body, the other to make use of it after its completion. But it is much more rational to conclude that there is but one principle transmitted from the parents with two classes of powers—one to build the body, and the other to use it as an instrumentality.
- 10. We do not feel the operations of the soul which pertain to organic life, except when these are disturbed by disease, as in injuries received by the body. That some of our psychical operations are not felt, is evident from the fact that we do not feel any sensations accompanying the acts of memory, imagination, or will. If this be true, then, of some of the conscious powers

of the soul, how much more may it be said of those unconscious, instinctive powers, which connect it with the different parts of the body? In regard to the first class of operations referred to, we are conscious of them, but do not always *feel* them when they arise, while in reference to the other class we are not generally conscious of their operations in health, but *feel* them as painful sensations only when disturbed by disease.

- 11. In the performance of the functions of organic life, the psychical powers operate instinctively and unconsciously. Accordingly, during the process of embryonic development the instinctive artificer of the bodily structure makes use of materials without any knowledge whatever on its part of the exercise of the powers, nor of the means or materials employed in the construction of the different parts, nor of the end to which its several operations tend.
- 12. In embryonic development, the unconscious powers of the soul unfold in connection with the unfoldment of the body, while the conscious powers of the personal soul gradually unfold, but not till after bodily formation has been completed. The unfoldment of the body depends upon the unfolding of the psychical powers, and not upon the reverse of this, as many naturalists maintain. Instead, therefore, of the brain forming the mind, the instinctive, unconscious powers of the soul form the brain as the necessary instrument for the development of its conscious operations, which take place through the aid of sense-organs.

13. We have stated that the immaterial, nonextended soul, as an unfolding entity, unites with the vital principle of the cell-protoplasm, and extends pari passu as the body extends through the multiplication and addition of cells. Withdraw, at any time before the body is formed, the nutrient supply for the formation of cells, and you prevent the development of the soul from taking place. The latter, failing to accomplish its development into a complete, personal existence, perishes in like manner as all fecundated germs may be said to perish, when they, on account of unfavorable surroundings, abortively fail to build for themselves an animal structure in which to complete the development of the indwelling, psychical agent. If you arrest the organic movements at any stage of embryonic development—say at the period of the formation of the blasto-dermic membranes (when the structure is unfinished, and when it can not be decided to be either man or animal), you would, in that case, prevent the formation of sense-organs, the only means by which the soul attains to consciousness. But when these operations are permitted to go on undisturbed, the psychical agent, by means of its own spontaneity of action, attains to a conscious, individual life or existence through the aid of the sense-organs, which by one class of its powers it constructs.

Having thus summarized our views in regard to the fecundating principle in its relation to *life*, and in its relation to consciousness or *mind*, let us now stop a

moment to inquire into the final disposition of those two agents—the psychical and the vital—at the termination of the life of the organism. The psycho-vital agent, being the organizing principle of the body, is connected with it by means of countless millions of cells; and the vital principle being the nexus or connecting link between the soul and each cell, we are led to inquire what constitutes the death of the organism. The soul acting in relation to the organism as a personal cause, any serious or important disturbance of its operations in the numerous cells of the body may terminate the cell functions, and the termination of the cell functions would constitute the death of the body. As the death of the organism is caused by the cessation of the functions of organic life, and as the body without the soul is dead, so the latter must be concerned, as we have heretofore claimed, in the performance of these functions. But in the final withdrawal of the psycho-vital force from all the cells, what becomes of the psychical and the vital agents? The soul must either sever its connection with the vital principle, leaving the latter in connection with the molecules of the organic cells, or else the vital principle must be separated from the cells, and continue its connection with the soul, which is in fact the case; for, upon miscroscopic examination of the cells after death, they will be found to have been deserted by the vital agent. This will appear from the fact that all amæboid or protean movements will then be found to have entirely ceased. If the separation

takes place between the vital principle and the cell, the latter must remain connected with the soul; for it evidently can not quit its connection with both, unless there is a third principle having a still stronger attraction for the vital principle than exists between it and the soul. There are but two entities, known to us, to which the vital principle shows any signs of relation or joint connection; viz., the molecules of the cell on the one side, and the soul on the other. If, therefore, it quits its connection with the one, it must remain more firmly united to the other. The same powers, then, which formed the cells and co-ordinated them into the structure of the body, giving to the latter all its animation and life force, appear, by a more consolidated union with each other, to be capable of surviving the body. The soul having lost one of the principles with which it was connected—viz., the material—is now clad only with the principle of life. Thus the psycho-vital powers which formed the body, and, by their joint union with it, took the form of the body, preserve the same bodily form as that which they had previously animated and deserted. Connected with the principle of life, the soul is a compound of two entities which survive the body as a personal and spiritual being. Over three hundred years before the Christian era, Aristotle advanced a theory of the soul in which he maintained that in man there is a nutrient soul which forms the body, and that there is, likewise, an animal soul, both of which, he held, were common to man and animals. He

also taught that there is a rational soul which pertains exclusively to man, and is, therefore, the immortal principle, the two former perishing, as he supposed, with This theory differs somewhat from the body at death. the animism of Stahl, who in recent times maintained that the soul is derived from the anima mundi, or life of the world; that it is the true, living principle which forms the body and maintains all its functions. theory of Stahl, however, was supposed to be materialistic in its tendencies, and hence met with but little favor among the opponents of materialism. to these views, we hold that the soul is transmitted at the fecundation of the germ; that it is, at first, a simple entity, but by uniting with the vital principle in the germ-cell and those of the vitalized blood-plasm, as these are taken up during the formation of the body, the soul becomes a compound entity. It is a very general belief that man is a compound of two natures, consisting of soul and body. In like manner, the disembodied soul may be said to be compounded of a sentient principle with the vital principle. The soul at death carries with it from the world the vital and more ethereal part of the material body. In the building of the organism, these two principles are indissolubly united to each other.

If the soul, as a causal energy, is, at death, capable of surviving the body, losing nothing but the cells of the body, it remains to be seen whether its higher conscious powers, which were developed through the

sense-organs while in connection with the body, can act independently of these organs when separated from the body at death. This question we expect to be able to answer in the affirmative purely on scientific grounds. The grounds to which we here refer are the unimpeachable data of consciousness, which is the only authority upon which any scientific investigation in regard to mind can be conducted. But in the pursuit of these inquiries we shall be compelled to bring before the reader a class of psychical powers which have heretofore received little or no attention by the speculative philosophers during the centuries that have preceded the present. Mankind has in every age of the world believed in the immortality of the soul; but if the soul is naturally immortal, it must be on account of a class of laws within it, capable of acting independently of the body, and hence capable of acting after the latter is destroyed and has returned to its primitive elements. Let us see, then, whether it is endowed with such capabilities and powers as will enable it to continue its existence after the death of the body.

In the division of the psychical powers into two fundamental classes, as the unconscious and the conscious, the former, we have shown, were necessary to the construction of the body; for without the action of these powers in producing sense-organs, the latter class of powers would not have appeared. The body, then, depends upon the soul for its existence, and the soul depends with equal certainty upon the organs of the

body for development of its conscious or mental powers. So much, then, for the importance of the former class of powers in the development of the soul from zero to its higher intellectual capacities. In addition to this division of the powers of the soul into two classes the unconscious and the conscious—we now propose to divide the conscious powers into two fundamental and widely-different modes of manifestation; viz., those which act by means of the sense-organs of the body in relation to the phenomena of the physical world and those which act independently of these organs in relation to the phenomena of the spiritual. These powers are known, respectively and distinctively, as the waking side and as the dream side of the mind. The one class can act only when the brain and nerves of sense are awake, while the other class appears to us only when the brain and nerves of sense are asleep. Sleep, then, unlocks the door to the apprehension of the latter class of phenomena, while the waking condition of the sensorium and its appendages temporarily closes it to such phenomena.

In reading the history of philosophy, it is surprising, indeed, to witness the remarkable discussions that have from time to time engaged the attention of men for a period of more than two thousand years, embracing the highest order of talents of every age of the world; and yet, in this discussion, philosophers have left one whole class of the mental powers almost entirely untouched, as if these powers of the soul were

too intricate or inscrutable for the human mind to investigate or seriously attempt their analysis. And what may be said to add still more to the surprise is the fact that the discussions to which we allude have been, to a very great extent, engaged in by philosophers of Christian countries, where the accepted religion, embraced by both peasant and the philosopher, has been, in a great measure, furnished to the world by celestial personages approaching the conscious powers of the soul on the dream side of the mind, as if this state or condition of the soul was much better calculated for presenting that class of phenomena which more properly pertain to the soul's future state of existence than that class of phenomena which belong to the rational and waking side of the body. Dreaming may be said to be nothing more nor less than a temporary natural vision of the soul, in which there is a sudden appearance of phenomena presented to our attention when the body is asleep. Thus the waking and sleeping conditions of the sensorium and the nerves under its control divide the conscious powers into two distinct classes; and, as dreaming is an action of the mind, which has no essential use in the requirements of the present life, it becomes necessary for us to inquire into the nature and character and end or aim of these operations. In the dream operations nature seems to be constantly throwing open to our view the portals of the soul, and urging this class of the mental powers upon our attention, while at the same time we have been as constantly

neglecting or refusing to enter upon their investiga-Whilst, therefore, the operations of the mind through the bodily senses in their relation to the phenomena of the material world have been so carefully studied, the phenomena presented to the consciousness in dreaming have been almost entirely neglected. Essential as the senses of the body are to the perception of the phenomena of the world in the waking state, these organs are not required and indeed are, for the time being, wholly unnecessary to the perception of the phenomena attending the dream state. Dreaming is a state of the soul in which the entire history of the world might, as we shall hereafter show, be summarily condensed by the laws of mind into phenomena of a peculiar nature and kind, representing everything as present to the consciousness in a very remarkably short space of time. And if on these occasions the will-power were in action, co-ordinating the thoughts of the mind, as it does in the waking state of the body, a complete and orderly vision representing the phenomena of the world might then be presented as objects actually present to the view of the consciousness, all being perfeetly arranged in that true order of phenomenal sequence in which the mind perceived them in the first place, when acting in connection with the sense-organs of the body. In this way we should have a world of phenomena presented by the soul quite as orderly as that of the external world. But then, upon the other hand, if the will were acting on these occasions, co-

ordinating our thoughts with their attending phenomena, we should be constantly confounding the dream operations with those of the waking state. sides, the will, being then in action, would be constantly setting the muscles of the body in motion, and the sleeping world would then become somnambulic, and we should all be moving about in a state of complete somnambulic sleep, in which case the nervous and muscular system, failing to obtain the requisite repose, would then fail to have the waste restored so as to maintain the normal conditions of the nervous system, and the result would be extreme exhaustion of the nervous system, ending in partial or complete paralysis, and even insanity. If, in the waking state, the will and the reasoning powers were held in abeyance, as they are in dreaming, the external world would then appear to us only as a dream; so that the dreamlike appearances of things, whether awake or asleep, do not depend so much upon the accordance, nor upon the discordance, of the surrounding phenomena presented, as it does upon the discordant condition of the will or mind itself at the time of their presentation to the conscious-Dreaming, then, must be rationally conducted to depend entirely upon the action of the will to coordinate the thoughts and the phenomena presented to the mind, while the waking state depends likewise upon the action of the will to co-ordinate the thoughts of the mind in order to prevent the veritable phenomena of the waking world from appearing to us only as a

For these reasons it is a wise provision of nature that the will-power is held in abeyance during the dream state, in order to prevent us from constantly mistaking one class of phenomena for that of another, which we would be very likely to do if the will were co-ordinating the thoughts while dreaming. Not only so, but, as above stated, we should be constantly acting out our dream by somnambulic movements of the body. As dreaming presents to the consciousness phenomena quite as unco-ordinated as the rise and successions of the thoughts are at the time of the occurrence, this class of phenomena have always been looked upon as being utterly incomprehensible in their nature, and hence there has been no serious attempt to analyze these apparent inconceivable mysteries. There are two classes of phenomena between which we are constantly oscillating: the phenomena of the material world on the one side, and the phenomena of the mind on the other. It sometimes requires but a very few moments of time to usher us from one class of phenomena to the other, from one world into the other. "Man," says Heraclitus, "is the occupant of two worlds: the world of the senses and a private world of his own." In dreaming we are ushered, as it were, into the estuaries of another life, a state of the soul in which we always mistake the phenomena then before us for those of the waking life. Such is the distinct character of the impressions produced at the time upon the mind that we never for a moment believe them to be the phenomena

of a dream, but, on account of the valid impressions which they produce upon the senses of the soul, we always believe that we are awake and grappling with the veritable phenomena of the material world. As a natural and spontaneous state of the soul, in which this class of operations comes and goes without our bidding, the phenomena of dreaming require to be reduced to a science quite as much as the waking operations; but we can not proceed further upon this branch of our inquiry till after we have considered the nature and laws of sleep. We must first show what sleep is, and how it affects our mental operations. Like the science of geology, which could be made out only by careful study and comparison with the forms of living beings, so the phenomena of dreaming can be reduced to a science only by careful comparison with the phenomena of the mind pertaining to the waking state.

It has been but little more than a century since Voltaire entertained the opinion that fossil remains were not the buried products of extinct races of beings, but were the productions of natural law—abortions of nature, as he called them—which had been brought about by her failures in the effort to produce the present races of animals and plants. He supposed that in the study of these relics of the past we were looking into the womb of nature instead of her grave. To account for the presence of fossil remains upon the summit of the Alps, many supposed that, as curiosities of nature, they had been gathered up by the soldiers of

Napoleon, and dropped by them in their march across the Alps. And although fossil remains have been constantly kicked about under foot for thousands of years, it was not till quite recently that their true import has become rightly understood and properly reduced to a science. By means of a study of this science we are now enabled to trace the history of the phenomena of life on the globe for millions of ages in the past. And what if the facts should show that there is a class of phenomena in the soul arising out of the impressions that the world has made upon it, which, when rightly understood, may serve to throw open to our view and comprehension countless millions of ages to come in regard to the future existence of the soul? Indeed, nature has been far more diligent in her efforts to press the latter class of phenomena upon our attention than she was in regard to buried remains of a former world. These efforts have been pressed upon us in like proportion as the future existence of the soul may be said to exceed in importance a knowledge of the former existence of life upon the globe. If the soul is immortal, it is by virtue of a class of laws which enable it to continue its operations after the dissolution of the organic structure. If such laws exist, there can be no good reason assigned why they should be entirely concealed from our observation, as has been uniformly supposed, more especially when all the other departments of nature have been placed within the reach of our compre-It is a mistake to suppose that the laws of hension.

nature have been exposed to our comprehension and study, while those of the soul have been hermetically sealed from our view. Why expose to our observation the entombed races of animals which have been so carefully preserved in their stony coffins in order that we might compare the past with the present living races, for no other purpose than to furnish data for a true history of life upon the globe, and yet at the same time completely conceal from our observation all *scientific data* in regard to the true nature and future existence of the soul? Such a view would be inconsistent in the extreme.

In the division of the operations of the soul into unconscious powers and into conscious powers, and the division of the latter into two classes, the first class we have designated the vital faculty, the second the mental faculty, and the third we propose to call the immortal faculty—each one of these having its own subdivision or differentiation of powers. These foregoing classes have a certain relation and dependence upon one another. Thus, without the primary class, there would be no physical organization, and without such organization there could be no development of the mental powers, and without the latter class there would be no immortality. As all unfecundated germs must perish, so all fecundated germs that fail to form an organization must likewise perish on account of the psychical principle failing to form a personal existence by means of a union with the vital principle in the organizing

process of forming a bodily structure, as well as on account of there being no sense-organs for the development of mental powers; hence the soul would fail in the accomplishment of the end and aim of its personal existence. At the death of the organism, the first class of the psychical powers, being primary and instinctive in their nature, carry away, as we have said, the vital principle with them from the world. The second class, being contingent in their operations, carry, folded up, as it were, in the reminiscent consciousness, transcripts of the phenomena of the world; while by the operations of the third class the soul possesses the capability of reproducing and objectively presenting to the percipient consciousness its own phenomenal transcripts of the world in ever-varying and endless vision. But of this anon.

We expect to be able to show that in dreaming the soul acts consciously and independently of the cerebro-spinal system of nerves, while at the same time the unconscious powers are capable of continuing their operations in connection with the ganglionic system of nerves, independently of the former class of powers and of brain action, as they did in the womb, and as they do in the case of children born without a brain. In dreaming, the soul only temporarily withdraws its conscious operations from the cells of that part of the nervous system that acts in connection with these powers in the waking state, while in death the unconscious powers withdraw their operations from the cells of or-

ganic life, which completely terminate the bodily functions. If the conscious powers can withdraw from the brain and senses and act consciously and independently of these organs in dreaming without suffering the slightest injury or impairment to the mental faculties (except, for the time being, the temporary suspension of the will and reasoning process), why not the unconscious powers of the soul withdraw their action from the cells of organic life, thus terminating the cell-functions at death, without the slightest impairment of any of the powers of the soul? But before entering upon the investigation of the questions here presented in relation to the third class of powers and their bearing upon the future existence of the soul, we must first consider the nature of sleep: what it is, and its effect upon the brain as well as its effect upon the mind.

## PART II.

THE RELATION OF THE SOUL TO THE WORLD AND TO IMMORTALITY.

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## CHAPTER I.

## SLEEP AND DREAMING.

## Section 1.—Sleep.

XIE have divided the psychical powers into two general classes: the unconscious, instinctive, which, in connection with the vital principle, build the body, differentiating all its parts and functions; and the conscious class, which constitutes the faculties of intelli-The former are primary in their nature, and are supplemented in their functional activities by the toning influence of the ganglionic system of nerves. As heretofore shown, this class has exclusive relation to the cell functions of "organic life," to the building of the body, and the production and maintenance of its different functions. On the other hand, the conscious or intellectual powers of the soul are secondary and contingent in their nature—as faculties of intelligence they are directly dependent for their development upon the brain and sense-organs immediately under its The intellectual operations, being, therefore, secondary in their origin and evolution, are not developed until after these organs have been completed in their formation. Hence, where one or more of the organs of sense is deficient or entirely absent, the intellectual development will suffer in proportion to such

privation or absence of the organ in question. Viewed in the light of the foregoing facts, the conscious powers are essentially dependent for their development upon the faithful performance of the unconscious, instinctive operations of the soul—those which form the bodily organs and keep them in suitable repair. have already shown how these powers form the brain: in the first place, by producing a simple nerve-cell, and then, by a process of subsequent division, multiply and differentiate the numerous cells into the several parts, until all the distinctive parts of the brain are formed. By this means the brain is so differentiated into a variety of parts and functions as to be completely adapted to the future wants and requirements of the sentient occupant in the development of its higher conscious life. Thus the lower, instinctive powers of the soul seem to anticipate, as it were, and provide instinctively for the wants and requirements of its higher operations those which are known and designated as faculties of mind. But though all the different parts of the body may be perfectly formed, yet the development of the conscious powers can not take place until the individual is brought into direct, percipient relation with the objects of the external world. This does not take place until after the birth of the individual. The soul, then, by means of its instinctive operations, environs itself with matter in the formation of the organic structure; and then, through the aid of the several senseorgans which these powers have provided, it is brought

into percipient relation to the great cosmos, or outer environment of the world around us. In forming the body, the psychical powers act as a personal causal energy, operating instinctively, unconsciously, and, for the most part, constantly and unerringly; while in regard to the second class of powers, which act in connection with the brain and senses, their operations are contingent, conscious, and rational. Unlike the former class, these acts of the soul are, when reasoning from false premises, frequently liable to fall into error. Corresponding with these two distinctive classes of the psychical powers, we have two separate classes of nervecenters, with which each class of our psychical operations are functionally connected; viz., the ganglionic system and the cerebro-spinal system. The functions of the former, like the instinctive powers of the soul, are unceasingly carried on from moment to moment during life, while the functions of the latter are subject to frequent interruptions on account of the periodic requirements of sleep.

The conscious or mental powers also divide themselves naturally and distinctively into two classes: one, which acts in immediate connection with the brain and external organs of sense; and the other, which acts independently of these organs. In this subdivision of the mental powers, the former class operate in the waking state of the brain and bodily organs, while the latter class act during the sleep of these organs. In other words, while natural sleep suspends the functions of

the brain and external senses, it does not suspend the operations of the mental or conscious powers of the soul only in relation to the objects of the external world. Hence, during the sleep of the bodily organs, the soul seems to be capable of entering upon a class of exercises wholly independent of the brain, the senses, and the material world, as appears in dreaming; for, while the organs of the body are indispensable to the performance of the mental operations during the waking state, they are not required to aid in the mental exercises of the dream state, so that this class of operations are always carried on while the brain and sense-organs are resting. It is to the study of this class of our mental powers that we expect to devote the remaining pages of this work. But in regard to the study of the intellectual or conscious powers of the soul, which, in the waking state of the brain and senses, connect us with the phenomena of the external world, we must refer the reader to writers upon mental science. In the pursuit of these investigations he will find an ample field open to his inquiries. Many of the questions there presented will be seen to have been the subject of most attentive thought and vigorous disputation for more than two thousand years; indeed, some of these questions are This is more especially the case in still unsettled. reference to certain questions pertaining to the philosophy of sense-perception and in regard to the office of the will in relation to the acts of intelligence and the bearing of these acts upon moral obligations.

As implied in the title of this work, the subject before us naturally divides itself into three parts; viz., the relation of the soul to the body, to the world, and to immortality. The First Part we have already considered and designated as the unconscious, instinctive operations of the soul, which, in connection with the vital principle, relate to the building of the body and the carrying on of the functions of "organic life." Part Second refers to the conscious or mental powers of the soul, which operate in connection with the brain and senses in relation to the objects of the external world. This class of powers, as we have said, naturally divide into two parts, according as the brain is awake or asleep during the mental exercises. The acts of the waking state relate to the phenomena of the external world, while those of dreaming have almost exclusive reference to the soul's immortality. In the true order of sequence, the latter division would properly constitute Part Third; but in the present arrangement it follows immediately after Part First for the reason that we have decided not to take up separately the consideration of the intellectual powers. But as we shall have frequent occasion to refer to the waking operations in connection with the subject of dreaming, we shall pass, with these general remarks on the order of this arrangement, to the consideration of sleep and its effect upon the brain, the senses, and the intellect.\*

<sup>\*</sup>Note.—For a full consideration of the intellectual powers, we must refer the reader to the numerous works on Mental Science, and to the pandects of Philosophy.

What is sleep? Natural sleep is the rest or normal suspension of the functions of the brain and nerves immediately concerned in the operations of the mind. With this definition of sleep (which is based upon the physiology of the brain and nerves of sense), our first proposition is that the sleep of this part of the nervous system can not take place while the mind is operating upon it or employing it as an instrumentality.

Proposition Second. The mind, as a general rule, does not cease its operations during the *rest* or *sleep* of the nervous system, as is abundantly exemplified in the phenomena of dreaming.

This brings us at once to our third proposition; viz., that, in order to afford an opportunity for the rest or sleep of these organs, the mind must be capable of acting separately, or, in some manner, independently of the brain and nerves of sense; for, as in Proposition First, it is evident that the nervous system can not rest, can not sleep while the mind is performing its accustomed operations upon it. And if, as in Proposition Second, the mental powers do not cease their activities during the sleep of the nervous system, then the mind must, in dreaming, operate independently of the brain and special nerves of sense, as claimed in Proposition Third. It is a self-evident fact that the brain can not sleep while it is engaged in the exercises of thought, nor the optic nerve perform the office of vision while it is asleep. In the waking state of the brain, the mental action is intra-organic; in the dream-state it is supraorganic—hyperphysical. How, then, it may be asked, is the periodic withdrawal of the mental operations from the nervous system brought about as a necessary precursor of sleep?

Before proceeding to answer this question, we must first institute a brief inquiry into the necessary condition upon which the action of the mind in connection with the brain and nerves depends during the waking hours; for upon a proper understanding of the latter depends the true explanation of the former. It is a well-established fact in physiology that there is a nervecurrent, which starts in the brain, as the great nervecenter of the organism, and follows the course of each and every nerve proceeding from it to the periphery The immediate effect of this of the nervous system. nerve-current is to give the necessary tone or *Innervation* to all the different parts of the cerebro-spinal system of nerves. Without this innervation of the nervous system, the power of the mind to employ the different nerves in their varied instrumentalities would be either partially or entirely lost; for an untoned, enervated brain and nerves of sense soon become entirely disqualified instruments for carrying on the operations of the mind, as is sometimes exemplified in paralysis from functional disturbance of some one or more of the nerves of sense, resulting in more or less permanent suspension of the functions of the particular sense or part affected. A similar effect is often observed to take place in the suspension of the powers of the mind over

the motor-nerves, resulting in paralysis of the muscles to which those nerves stand related. This disability is doubtless owing to deficient nutrition, and not to any disturbance of continuity in the fibers of the nerves themselves. To keep up the necessary supply of this nerve-current, then, there is constantly forming in the brain and other nerve-centers a class of cells of unstable chemical composition, whose office it is to furnish the requisite amount of this fluid to the different nerves distributed to the organs of sense and to the voluntary muscular apparatus. In order, therefore, to furnish this required amount of innervating nerveinfluence, there is a constant nutritive action going on in the brain, sufficient to compensate for the waste which takes place by the decomposition of the gray matter of the brain, upon which the supply of this nerve-current depends. Hence, to keep up the supply of this fluid, assimilation must equal disassimilation, nutrition and waste must balance each other; or, where inequality arises, the expenditure must stop till the equilibrium is restored by the nutritive process. Hence the necessary requirements for the regular, periodic return of sleep; for, as the expenditure of the waking state is greater than the supply which takes place during the waking hour, in order to keep up the proper tone of the nervous system, the mental operations which are carried on in connection with the cerebro-spinal system of nerves must be either temporarily suspended or averted, so as to furnish an opportunity to restore

the wasted material consumed during the waking operations. Otherwise this restoration could not take place, especially if the waste were as great in sleep as in the exercise of the waking hours. As soon, however, as the necessary supply has been furnished by the formation of new cells in the brain to support the requisite innervation of the nervous system, wakefulness is restored. The restoration of the normal quantity of this nerve-force, then, gives energy and tone to the nervous system, while the reduction of the current below the proper standard so enervates or untones the nervous system as to render the latter unfit for the operations of the mind.

When enervation takes place, a sense of lethargy and uneasiness arises; the senses and muscles lose their normal standard of activity, and, almost immediately following upon this state of inactivity, the senses cease to respond to the impressions made upon them by external objects; a sense of weariness prevails; the individual is no longer able to maintain the erect position of the body, and, as a consequence of this feeling, seeks the recumbent posture. The limbs now bend themselves into easy position, and in a short time, owing to the inability of the nervous system to carry on its normal activities, all the operations of the mind in connection with the brain and nerves of sense become completely withdrawn, so that the whole system of nerves, upon which the mind had depended for its action in the waking state, lapses involuntarily into inactivity and repose. In the meantime, the subtile nervecurrent being now for the most part suspended, the nutritive operations, which are constantly active, soon restore the deficiency brought about by the waste of the gray matter of the brain, and thus the nerve-current is again restored to its normal standard. The brain and nerves of sense being now properly toned and restored to their former vigor, the mental operations, which had been actively going on during the sleep of the brain, soon begin to catenate with the cells of this organ and with the cells of the nerves of sense, thus restoring us again to the waking condition. Whenever the supply of this current has become sufficiently abundant by the restoration of the wasted nerve-cells, the mind, resuming its action in connection with these cells, starts the nerve-current, and thus tones up the whole nervous system, so that we are now, as it were, wound up or toned up again for the exercise of the waking hours. Whenever, therefore, this supply becomes exhausted or diminished through the mental and bodily exercises of the day, we are again untoned and fitted only for the rest or requirement of sleep. By this process of toning and untoning of the nervous system we are thus constantly oscillating between the waking and sleeping states.

That the rest or influence of sleep extends to the whole cerebro-spinal system of nerves is evident, first, from the complete suspension of the functions of all the special nerves of sense connected with the opera-

tions of the mind. As sleep approaches, there is not only an inability to prevent the eyelids from closing on account of the loss of nerve-power which presides over them when awake, but if we carefully separate the eyelids during sleep, we shall find the pupil of each eve contracted to nearly the size of a pin-head, while, if we close our eyelids when awake simply in order to exclude the light, in that case the pupil of each eye will be found dilated. These facts show that in the one case the nerves supplying the pupil are awake and performing their accustomed office; while in the other the same nerves have their function suspended, hence their contraction in sleep. In connection with these facts it is well known that during sleep the functions of the optic nerves, which have their origin at the base of the brain, are also completely suspended. regard to the auditory nerves, which rise near the medulla oblongata, where the spinal column of nerves connect with the brain. These nerves, to which belong the office of hearing, cease to perform their function in connection with the mind during sleep.

That sleep extends its influence to the medulla oblongata, which is the well-known center of respiration, is evident from the effect produced upon the respiratory movements at these times. As these movements are, to a certain extent, under the influence of the will, they are rendered slower, deeper, and louder than in the waking condition, thus showing that the nerve-influence derived from the voluntary system of nerves con-

nected with the respiratory action is temporarily suspended. That it is the voluntary nerves supplying the muscles of the chest that are asleep is evident from the fact that at these times we can not maintain any voluntary control over the respiratory movements during sleep. So striking is the effect of sleep upon the respiratory movements that we often listen to the sound of these movements in order to determine with greater degree of certainty whether the individual is asleep or awake. And were the influence of sleep to extend only for a short time to the whole of the medulla oblongata, in which is located the involuntary nervecenter of respiration, we should then have a complete suspension of the respiratory action, resulting in the sleep of death. These nerve-centers, however, not being under the control of the mind, are, on account of their involuntary functions, not subject to feelings of weariness, hence are not subject to the requirements of sleep. So, if we continue to follow up the spinal nerves that are connected with the operations of the mind to their termination throughout the whole course of the spinal column, we shall find that the muscular nerves, which come under the influence of the will, are all suspended in their functions during the continuance of sleep. Likewise, the sentient nerves that proceed from the posterior part of the spinal cord and are distributed to the entire surface of the body are in a state of more or less anæsthesia on account of this class of nerves being brought under the influence of sleep.

Having thus briefly considered the nerves connected with the operations of the mind as they are found to crop out upon the exterior of the body in reference to the suspension of their functions in sleep, let us now extend our observations to the sleep of the brain, which is the great mind-center of the nervous system. In those cases where a portion of the bony covering that envelops the brain has been removed so as to expose this organ to view, it has been found that, during sleep, the brain is sunken and lying almost motionless within the cavity of the cranium. The brain is subject to two motions (and only two): one corresponding with the movements of the heart and circulation of the blood, the other with the movements of respiration. Both these movements are, therefore, purely mechanical, so far, at least, as the brain is concerned, and not the effect of the operations of mind upon this organ. During dreamless sleep these movements of the brain are but slight; in vivid dreams they are greater; while in the waking condition they are still more strikingly manifested, so that the brain is disposed to rise and fill the cavity made by the absence of the bony covering. Dreaming is purely an action of the mind, separate, as we have said, from the brain. When, therefore, these operations are vivid and terrifying, the emotions sometimes become greatly aroused. It is a well-known fact that any high degree of emotional excitement, whether awake or asleep, always has more or less effect upon the movements of the heart and lungs; hence the effect

of these indirect mechanical movements frequently becomes less strikingly manifested in the brain during sleep than when awake. It must not be forgotten that the relation of the soul to the body is that of a personal cause; that it has two classes of powers—the unconscious, instinctive, which stand in constant causal relation to the cells and functions of "organic life;" and the conscious, whose operations, when awake, are connected with the brain and spinal nerves. The last-named powers are subject to great interruption, being sometimes completely suspended, as in unconsciousness and in periodic sleep. Whenever, therefore, in the waking state, one class of these powers, as the latter, become greatly disturbed, they may exert such an influence upon the involuntary class as to produce either an exalting or depressing effect upon the functions of organic life, and vice versa. For example, where the emotional feelings of the soul become greatly aroused, as they sometimes are in dreaming, the effect is felt or experienced throughout the soul, so as to disturb its unconscious powers, which at all times operate in connection with the cells and functions of organic life, even while the brain continues in undisturbed sleep, and hence entirely independent of any transmission of impressions through this nerve-center. The brain, then, always remains in a state of more or less complete functional inactivity during sleep, being subject only to slight mechanical movements caused by the effect of the action of the heart and lungs upon the circulation of the

blood in the brain. The quantity of blood in this organ is somewhat lessened at these times, owing, no doubt, in part to a slight shrinking of the cerebral mass, which tends to diminish the caliber of its blood-vessels. Dreaming is an action of the mind which can not take place in the waking state of the nervous system. Hence it is the body that sleeps and the mind that dreams. In other words, it is the cerebro-spinal system of nerves that sleep, while the ganglionic system of nerves do not cease their functions either awake or asleep. If the brain did not sleep it would soon become an unfit instrument for the mind to employ, and the entire system would in a short time become a complete wreck on account of general nerve enervation or prostration.

Innervation and enervation of the nervous system are both, then, necessary conditions of our nature. The one is the result of supply, the other is the result of waste. Both are, therefore, normal conditions, and both are sometimes abnormal. Thus through an excess of the nerve-fluid the excitability of the different senseorgans may become greatly exalted, as in hyperesthesia; while an exhaustion of this fluid, as when suddenly falling below the normal standard required for sleep, may sometimes result in syncope, or in paralysis of the nerves—a condition in which the mental operations connected with the paralyzed part will, as in the case of the paralysis of the sense-organs, become partially or entirely suspended.

We have said that, in order to keep up the requisite

supply of normal energy, nutrition must, in all cases, be equal to the waste of nerve-matter, which is required to innervate the nervous system. If, therefore, any part of the nervous system should, from any cause whatever, fail to receive the proper supply of nutritive elements, the part in which this failure takes place will be unable. for want of sufficient innervation, to serve the mind in relation to the particular function of such part; and, until nutrition becomes restored to its proper standard, paralysis and often atrophy of the nerve will be the result. Thus, if the necessary nutrient supply of nervecells for generating the nerve-current should fail to be furnished in regard to the optic nerve-centers, functional paralysis or amaurosis of these nerves would then take place. If like failure should occur in the auditory nervecenters, paralysis of these nerves and deafness would be the result. And where similar failure takes place in a nerve-supplying one of the muscles, in that case we should have paralysis of the muscle to which the nerve is distributed. The same result follows where the flow of the nerve-current is interrupted, either by lightning, ligature, pressure, or by wounds of the trunk of the nerve. In cases where the flow of this current has been suddenly arrested in one of the hemispheres of the brain, hemiplegia or paralysis of one side of the body will take place; and if the disturbance in the generation of the nerve-current should extend to the sentient track of the paralyzed side, complete anæsthesia, or suspension of the sensibility of that side, will supervene.

The view which we have here taken in regard to the causes that lead to the withdrawal of the mental operations from their connection with the brain and nerves of "animal life" during the sleep of this part of the nervous system, will also serve to throw light upon some of the heretofore mysterious and unexplained morbid conditions of the functions of the nervous system. For instance, the enervation of the nerves at the approach of sleep, and the enervation which takes place in paralysis, are in some respects quite similar, as both conditions depend upon a diminution, or more or less approach to a complete suspension, of the flow of the nerve-current; but they differ from each other in this respect, that in sleep the equilibrium is restored again by the nutritive functions, while in paralysis the nutritive operations fail to supply the deficiency, both when awake and when asleep. They also differ from the circumstance that in sleep the suspension of the nervous operations generally extends to the whole brain and all its immediate nerve-connections, while in paralysis, on account of failure in the nutrition of some particular part, the suspension of the nerve-functions commonly extends to a single nerve, or to only a part of the nervous apparatus. In the one case, the suspension of the mental operations are normal, and hence only temporary; in the other, the suspended functions are abnormal and more or less persistent—persistent on account of the total failure of the nutritive supply of innervating nerve-cells, which furnish the nerve-current to the part

affected—resulting in what is commonly called paralysis from some occult, functional disturbance of the nerves affected. In sleep the functions of all the nerves of sense are suspended; but the mind, continuing its operations, as in dreaming, may, on account of the return of the innervating current, recover its action upon the nerves of sense the same as before; while in paralysis, for the want of the return of this innervating fluid, the mind fails to regain its action in connection with the nerves of the paralyzed part.

Sleep, then, may be termed a temporary enervation of the brain and nerves, while paralysis is a more or less permanent enervation of some particular part of the nervous system. Natural sleep is enervation attended with reparation, while paralysis may be regarded as enervation unattended by the nutritive process of reparation. Hence sleep is transient—paralysis, more or less permanent. The accumulation of nervous energy awakens us spontaneously, and, as it were, insensibly, upon the occasion of the slightest feeling of disturbance, either internal or external. In paralysis this feeling of energy is absent on the side affected; the insensible limb hangs like a dead weight to the side of the body. We have a remarkable exemplification of the influence of sleep upon the muscular centers in shaking palsy (paralysis agitans), where the muscular movements suddenly cease immediately upon the sleep of these nerves, and as suddenly return upon the return of their wakefulness, thus clearly demonstrating that sleep extends from the nerve-centers of the brain through the entire spinal column of nerves.

As it regards the precise nature of the nerve-fluidwhether it is an electro-chemical agent, or whether it is electro-magnetic, physiologists are at the present time undecided. Dr. Brown-Sequard says (in his Boston lectures on the nervous system, 1874) that nerve-force is a unit somewhat allied in its properties to electricity or galvanism. If this view be correct, it is not an agent of differentiating power; it does not produce the varied sensibilities of the sense-organs; it only aids in the functions of the organs in supplying to each a necessary agent which is requisite in the performance of the different functions of these organs in connection with the operations of the mind. It is the psychical agent that constructs the organs of the body, and so differentiates their structure and functions as to suit its higher operations, which we call mind. Thus the unconscious powers of the soul, in connection with the vital agent, constructs cells by its nutritive action for the use of the higher conscious operations, so that one class of the psychical powers furnishes the necessary requisite for the operations of the other. One class of powers forms cells for the other class to consume in the liberation of a subtle force to aid in the performance of certain cell-functions, which are absolutely necessary to the production of sense-perception, which is one of the first conscious acts of the soul in the development of the mental powers. These facts tend to confirm the view we

have heretofore set forth, that the soul, by one class of its powers, builds the body as a proper instrumentality to be used in the performance of its conscious operations, and for the purpose of providing its successor in the propagation of species. It is for these purposes—and for these alone—that the body is formed through the agency of the unconscious, instinctive powers of the soul.

We might add in this connection that a somewhat similar toning influence is carried on through the ganglionic system of nerves, which are ramified in connection with the countless blood-vessels distributed to the minute parts of the system, thus supplying a necessary, subtle agent for the chemico-vital processes going on in the myriads of microscopic cells of which the body is composed. In this way we may often account for defective nutrition attended with great bodily waste caused by deficient tonicity; or upon the other hand for an excess of nutrition, giving rise to obesity from an excess of the toning influence carried on in this system of nerves. There is no doubt a subtle agent supplied by these nerves, which supplements the psychovital forces operating in the cells of organic life. this be the correct view, any great deficiency of this toning influence occurring in the so-called trophic cells and nerves of the part may often result in disease, or even gangrene and death of such part.

## Section 2.—Dreaming.

Having thus briefly considered the nature of the nerve-current, both in its relations to the waking and sleeping conditions of the body, in reference to its toning influence upon the nerves of "animal life" and those of "organic life," let us now turn our attention for a short time to the mental operations, and see what changes are taking place in regard to the secondary or mental powers of the soul during the sleep of the brain and nerves of sense. Every physiologist will admit that during normal sleep all the nerves of special sense are asleep, and hence are not performing their office in the several sense-organs. And all physiologists and pathologists admit that the brain must sleep in order to maintain its healthy condition, such as is required for the performance of the mental operations. We have defined sleep to be the rest or normal suspension of the functions of that part of the nervous system concerned in the operations of the mind; and as the mental operations continue during sleep, as in dreaming, it is necessary, in order to afford the opportunity for the sleep of the nervous system, that these operations should cease to exert their activities upon this part of the nervous system, otherwise they would perpetuate the continuance of the waking condition. The mind then, in the waking state, must link its action with the cells of the brain and with the cells of the nerves of sense, in order to maintain its relation and intercourse with the objects

of the external world, while in sleep it must with like certainty act disconnectedly or separately from the cells of the brain, the nerves of sense, and consequently independently of the external world. In this way the opportunity is afforded for the necessary rest and renovation of the wasted cells of which the bodily organs are composed. In the waking state of the nervous system the mental operations are therefore *intra-organic*, while those which take place in dreaming are *supra-organic*—super-sensible. There is, then, but one step between the mental action connected with the organic and that which is hyperphysical; and that step is taken every night of our lives.

The withdrawal of the mental operations from the nervous system generally takes place so gradually and insensibly to us, in sleep and dreaming, that at the last moment of our wakefulness we do not, at the time of its occurrence, have any knowledge or consciousness whatever of its taking place, until after the period of sleep has terminated. Indeed, so readily and insensibly do we glide over the margin that separates one state from the other—from that of the waking brain operation to the independent and spontaneous action of the mind in dreaming—that we never feel the change from one state to the other, from waking to dreaming. But on the contrary, we always believe at these times that we are awake and acting through the bodily senses upon the objects of the physical world. We do not seem to recognize the fact that any change whatever has taken place,

either in regard to the inner senses which are then employed, or to the class of phenomena which they bring to our notice. In fact, so readily and insensibly do we lose our relations to time and space, that at the outset of a dream the mind will often commence representing a scene or an occurrence of childhood, which possibly may have taken place in Germany or in some other foreign country in which the individual may have resided in early life. Indeed, it may be said that in every dream we experience we always represent in our immediate surroundings that we are occupying some other place than the one in which the body is at the time reposing. The scenes presented to our observation while in this state do not appear to us simply as something remembered in regard to the past, but always as something then occurring in the presence of the soul; for the scene itself is a vision presented to the inner senses, when the outer senses of the body are asleep. It has an objective relation corresponding to a subjective, mental action attended by the same sensations in the soul at these times that we experience through the senses of the body when the latter are awake. On such occasions the soul possesses the power of presenting objectively a class of scenery independently of the bodily organs and their physical surroundings. Our senses are therefore twofold—an inner and an outer—which alternate with the waking and dreaming states. As the eyes of the body close to one class of phenomena, the eyes of the spirit open to another, in regard to the nature, character,

and description of which we are now about to speak; for, as elsewhere shown, our senses are duplicated; it is not the outer sense-organs that see and hear when awake, but the sentient principle that dwells within them.

In the former part of this work our attention was directed more particularly to those instinctive, unconscious powers of the soul which connect it with the body and its physiological functions; but we are now about to pass over the boundary-line that connects the soul with the body, to enter upon the adjacent borderland, which is presented to our observation in the mysterious realm In this borderland, where the sleep of the of dreams. brain forms the boundary-line between the present and the spiritual operations of the mind, our thoughts, which are derived from the impressions of things in the waking state, reappear to us as real things in the dream state. Besides these appearances, we find other changes taking place, such as the increased rapidity of the thoughts, as well as certain changes in the operations of the different faculties themselves.

The mental operations, as studied on the waking side of the nervous system, have been divided by writers on mental science into three distinct classes; viz., Intellect, Emotions or Feelings, and Will. In consequence of the paralyzing influence which enervation and sleep bring upon the brain, the two former are set at liberty, as shown by their greatly-increased movements, while the Will as suddenly drops into comparative inactivity or almost complete abeyance. Thus, while the action of

the latter is placed under restraint, on account of the sleep of the brain, the operations of the two former, for like reasons, being less closely linked in their operations with the cells of this organ, become greatly accelerated in their movements. The sleep of the nervous system therefore completely truncates the operations of the mind in regard to some of its powers—suspending one faculty—and at the same time giving rise to an increased acceleration of others. As a striking exemplification of these facts, we find that, in the waking state of the nervous system, the Will not only starts up the bodily movements, but has the power of co-ordinating all our thoughts into more or less orderly sequence; while in dreaming these bodily movements are measurably suspended, and at the same time the thoughts of the mind are unco-ordinated, and hence erratic and incoherent, both in their rise and procedure. So constantly do these effects take place in regard to the different faculties of the mind during the sleep of the brain, that the laws pertaining to these strange and incoherent mental operations are seldom found to vary in hundreds of millions of instances that are nightly occurring throughout the world.

If the mental powers did not temporarily drop their connection with the brain and nerves of sense in sleep and dreaming, this part of the nervous system would entirely fail to obtain the repose necessary for the reparation of the waste of brain substance during the waking hours; and experience fully shows that without a resto-

ration of this kind we should in a short time suffer a complete prostration and wreck of the nervous system, which would very soon result in more or less mental disturbance, such as delirium, mania, or even death itself. The action of the Will being suspended in sleep, shows that the waking relations of the mind to its instrument have undergone a very decided change, which is brought about by the sleep of the brain. If the brain were awake during sleep, and the Will exerting its influence upon the motor-nerves proceeding from this organ, the body would fail to receive its requisite repose, and on account of the mind operating upon its instrument the millions of earth would all become somnambulists every night of their lives. But as the power of the Will over our thoughts is suspended at these times, the thoughts of the mind are left to drift along without any system or government, either in regard to their rise or dependence upon each other, hence the great incoherency and inconsistency that take place in our dreams; and hence, too, the almost complete inactivity of the muscles under the control of the Will. In the waking state, the mind acts in the nerve-cells of the brain, not only in order to liberate the nerve-current requisite for the innervation of the nervous system, but, in consequence of this connection with the brain, it becomes retarded in its movements, so as to give us an opportunity to dwell a sufficient length of time upon the different objects of sense, thus enabling us to obtain a clear perception of each and every object presented.

Without such connection of the mental operations with the cells of the brain, the mind would be unable to direct the bodily movements from one place to another. dreaming, the conscious operations of the soul, by losing their connection with the brain-centers, instantly start off with a rapidity which greatly surpasses any of the operations that take place in the waking state of the brain and sense-organs. It is undoubtedly a wise provision of our nature that the Will fails to co-ordinate the thoughts of the mind at these times; otherwise, our whole life would result in confusion, for we should then be constantly mistaking one class of these mental operations for that of another, which would soon plunge us into an inextricable maze of falsehood and error. the waking state, the mental operations are retarded on account of their connection with the cells of the brain and nerves of sense, while in the dream state, for the want of this connection, these operations are greatly accelerated. In the one case the action of the mind is intra-physical, while in the other it is hyper-physical supra-organic.

Besides these changes in the condition of the mental faculties, a very remarkable mental power is brought to light, which is not recognized in the waking state of the organs. I mean that power or faculty which the mind possesses of reproducing, or rather representing, the phenomena of the external world, as psychical objects or transcripts, to the view of our consciousness. We are not only conscious at these times of our thoughts and

different trains of thought, but we are likewise conscious of perceiving a class of objective phenomena displayed around us, that is capable of exciting our emotions to a very high degree. The phenomena presented to view on these occasions often awaken in us emotional feelings which are sometimes agreeable, at others intensely exciting and painful, even to an alarming degree. The excitement at these times often surpasses anything which we are called upon to experience in the waking state of the organs.

Notwithstanding the remarkable contrast existing between the waking and dreaming states, there is in many respects a very striking analogy existing between them. Thus every action of the mind belonging to the waking state may be observed at one time and another during the multitude of our dreams, except that of the reasoning process, which at these times is almost constantly held in abeyance on account of the want of the co-ordinating power of the will in directing the thoughts and arranging them into logical sequence. Without the co-ordinating power of the will, reasoning would be utterly impossible, either in the waking or dreaming states of the mind. In dreaming, we are conscious of seeing, hearing, feeling, tasting, smelling, remembering, etc. We experience in this state all the varied emotions of the mind the same as when awake such as fear, pleasure, pain, love, hatred, etc. dition to these subjective feelings, there is a class of phenomena standing in objective array before us, which

correspond in every respect with the subjective thoughts, sensations, and emotions of the soul. This class of phenomena is wholly unobserved in the waking state of the body, on account of such phenomena having no direct relation to the corporeal senses. How, then, are we to account for the presence of such phenomena when the body is asleep and the soul engaged in dreaming? We answer, there are two classes of phenomena; one appears to us only when we sleep, the other appears to us only when the brain and senses are awake, and always disappear from our conscious presence when the external senses are asleep. The one class, then, appears to us through the bodily senses, the other independently of them. Both are alternately perceived. We are conscious of both, and can describe the appearance of both. Both classes alternately intrude themselves upon our attention, whether we desire it or not.

In the waking state the phenomena of the world exist independently of us. Each particular phenomenon is presented to us through a special sense-organ, in which it is perceived; but in dreaming the order is changed: the phenomena presented are furnished by the soul, as a constant and necessary accompaniment of thought. We can not prevent them from appearing. We can not exert any voluntary control over them. They come and go with the thoughts of the mind and without our bidding. In this state we can not reproduce a thought without at the same time reproducing the phenomenon which originally gave rise to it

through some one of the sense-organs of the body. Every thought has relation, therefore, to a phenomenon of some kind, as an elementary principle of its pro-In dreaming, the phenomenon appears as a necessary accompaniment of the thought. Each sensephenomenon that appears on the dream side is made up from a perception of the waking side. We can prevent a sense-phenomenon from appearing on the dream side only by preventing its perception from taking place on the waking side. For instance, if you destroy any one class of the sense-organs at birth, you will then prevent that class of perceptions from taking place which stand Thus the totally in relation to the disqualified sense. blind from birth have no perception or knowledge of light or colors when awake, and they have no phenomena of this kind presented to them while dreaming. different, however, where total blindness does not occur until at or near the period of adult age, when these perceptions have found a place in the memory. case the phenomena of light and colors are depicted in dreams the same as if no injury had taken place to the external visual organ. In those cases in which thoughts exist in the mind of the dreamer the phenomena will always appear in ready response to the particular character and kind of thoughts that arise. Facts like this show that the process of dreaming is altogether a mental process; hence, where total blindness does not take place until adult age, the complete loss of the function of the optic nerve and its entire inability to serve the mind

when awake does not in the least impair or prevent the vision of objects from taking place, nor the appearance of light and colors in dreams. The power, then, to perceive visual objects in dreaming is precisely the same in those instances where the nerve is incapable of performing its function when awake, from accident to the nerve at adult age, as when it is capable of performing its office perfectly, thus showing very conclusively that the nerve is not, in either case, contributing any immediate aid to the dream process, and showing also that it is the brain and nerves that sleep and the soul The individual deprived of his alone that dreams. sight at the age of adolescence, sustaining a complete loss of sight at this period of life, when asleep, sees. When awake, he is blind. When awake, the phenomena of the external world are completely shut out from his view; when asleep, the phenomena of the soul alone appear.

It is a well-known fact that the blind from birth see no objects in their dreams, but are conscious of feeling objects the same as in their waking state. This is owing to the fact that the soul, during the sleep of the tactile nerves, reproduces the tactile feelings pertaining to the finger ends independently of this class of nerves, and quite as distinctly as when the nerves of the hand were performing their function in the waking state of the brain. Thus, if he is a musician, he dreams of feeling his violin or flute and of hearing the sound of well-timed music; perchance he may feel his long since

absent friends, as it were, about him, and personate them by giving to each that intonation of voice which pertains to the different characters of his dream. In discriminating the different sounds of the voice, as expressed in the echoes of his dream-thoughts, he is, at such times, as unlikely to commit mistakes as he would be when awake—so faithful is the mind while dreaming to represent correctly the accompanying phenomena pertaining to his thoughts. To him the dream-world, like the waking world, is one of total darkness; but at the same time it is a world in which he is able to represent psychically all the phenomena of the physical world that had been previously perceived through the remaining senses of his body.

A similar deficiency appears in those who have been deprived of the sense of hearing. Thus the deaf from birth never dream of hearing sound of any kind, because they are entirely unacquainted with sound when awake. As the phenomena in dreams depend upon the thoughts of the mind, where there are no thoughts there can be no phenomena perceived. Hence, where there is no knowledge of sound there is no sound observed in dreams. Unlike the case of the blind from birth, the deaf from birth will be able to present, through the representation of his dream thoughts, a complete facsimile of the appearance of his friends; but there will be a total absence of all vocal sound. With him, all conversation must be carried on by signs, the same as when awake. With those persons who are

both deaf and blind from birth, their dreams will be to them as silent and as dark as the waking world. Now, if we increase this deficiency by destroying the sense of taste and smell at birth, in that case there would be on the dream side a total absence of all colors, sounds, flavors, and odors; but the individual thus situated would continue to possess the sense of feeling in his dreams, the same as when awake. But if at birth he were deprived of this sense also, we should then have an instance in which the mind would be devoid of all thought; and without thought dreaming could not take place, because in the total absence of thought there can be no mental phenomena, and without objective phenomena of some kind as a sense-sign, the act of dreaming would be utterly impossible. We have no living example of this kind to which we can refer, except in the womb, where every sense of the body may be perfect, but the phenomena of the world being shut out from the sense-organs, the effect on the mind in reference to mental phenomena would be the same as in the supposed example referred to above. The unborn infant can not think, can not dream. True to this law, then, whatever appears on the waking side appears also on the dream side of the mind; and whatever phenomenon is completely withheld from the waking side is also withheld from the dream side. In dreaming we can therefore only represent such phenomena of the world as have been perceived by the mind when awake; we can dream only of that which we know.

The foregoing examples show conclusively that all our thoughts have their true foundation in our perceptions of things, and that all that class of thoughts which relate to essence, to principles and laws, arise in the mind in consequence of our perceptions of things and their apparent relation to us and to one another. external phenomena—say, of colors—produce in the mind a perception of colors. The mind, or, more properly speaking, the soul, is then capable of abstracting these one by one until, at last, it may hold but one color as an object for consideration and contemplation. may now reason on the particular color thus abstracted, and trace it in its relation to light and to other colors of the spectrum and their bearing upon the phenomena of vision. Every color, then, as a physical phenomenon, posits its special character upon the conscious Eqo. is by means of the acts of perception acquired at different times and through the different sense-organs of the body that we obtain a knowledge of the various phenomena of the world. The perceptions of the external phenomena thus acquired are arranged or synthesized by the mind (soul) into ideal concepts, which synthesized concepts represent the different objects of sense in like manner as the letters of the alphabet are arranged into words so as verbally to represent our mental concepts. Hence the mind, in dreaming, represents the different objects of the world by the arranging and rearranging of the different phenomenal qualities that enter into the make-up of the objects. The complete order and

arrangement of these objects can not take place except where the faculty of the will is in operation so as to bring the thoughts of the mind into logical sequence. But in dreaming this faculty is held in abeyance; hence the inconsistency and confused appearance of the phenomena presented on these occasions. There can be no thought except it has relation to a phenomenon of some kind. In dreaming, the reproduction of the thought is always attended with the reproduction of a corresponding phenomenon which truly represents its external material prototype. The phenomenon appears, the thought does not. We are simply conscious of the existence of the thoughts, while the phenomena appear as an object of sense-perception; and as the thoughts at these times are unco-ordinated and confusedly arranged, so are the phenomena. If the will were acting at such times so as to co-ordinate the thoughts, as in the waking state, the phenomena would then appear in the same order as the phenomena of the external world, or as nearly so as our intellect could reproduce that order. The transition from the waking condition to sleep is generally accomplished so suddenly, insensibly, and unconsciously that we are never aware of the change from one class of phenomena to another until we awake. And as the phenomena of the external world exist independently of us, so in the dream we are not aware that the phenomena presented are the production of ourselves; hence we accept everything upon the testimony of the senses, which we never distrust.

As all dreams are but the fragmentary reproductions of our waking thoughts, if we attempt to unravel the tangled skein which is formed by the mind in this state, we shall find that every appearance presented to view, however strange or unique, may be analyzed or traced back by an unraveling process to objects of external sense. Thus we can not dream of the hippogriff without being first familiar with the forms of the horse, the lion, and the eagle. In the rapid flight of thought, these ideal forms may combine into a complex concept, so as to present to our view objects of a very unique appearance, such as the winged horse, or hippogriff, of fable. Hence the strange combinations of thought and phenomena that characterize our dreams. In all such cases where compound objects are presented to the senses of the soul, their existence is, at the time, like the existence of the objects of the waking state, seldom doubted or seriously called in question. Nor can we stop to correct the errors that may arise while in this condition, unless indeed we could be made aware at the time that the objects presented were of our own production; but in that case our reason would have to be in full operation in order to make the necessary correction. often dream of seeing friends long since dead, but in these instances our friends being perfectly represented in regard to their features, size, color of the eyes and hair, together with the perfect intonations of their voice, all of which personate them so completely that we never at the time call their immediate presence into

question. This is owing to the fact that we have always been taught to rely on the testimony of the senses when awake; and hence we rely equally upon their authority when we are dreaming. If, therefore, we dream of a friend long since dead, the personification is often so distinctly realized by the consciousness that it overbalances any mere recollection that we may entertain in reference to his prior decease; for, whether awake or asleep, we always believe in the realization of our present sense-perceptions and in the existence of the objects by which they are actuated.

Having thus considered the complete dependence of the phenomena of dreaming upon the thoughts of the mind, let us, before proceeding farther in this direction, devote a few moments to the definition of Webster defines thought to be "the act of thought. thinking; the exercise of the mind in any way except sense and perception; reflection." Worcester defines it to be: "(1) The act of thinking, or the mental state of one who thinks; any state of consciousness which is more than mere sensation; cogitation. (2) A creation of the mind having distinct existence from the mind that created it; an idea; a conception; a conceit; a fancy." I would define thought to be a conscious act of the soul (mind) in relation to an object of some kind, pertaining either to the material or the spiritual. We say, a conscious act of the soul; for, as we have already remarked, the soul is endowed with a class of unconscious operations which act in connection with the mole-

cules of the cells in the performance of the involuntary functions of "organic life." The last-named powers have reference to the molecules of matter, while the former class relate to the phenomena of matter, as appear in the subjects of the external world. The exercise of the latter powers pertains to thought, which is a conscious act of the soul, having reference to some object. In the waking state, we can not think without referring to an object of some kind, either an object of sense, or of time, space, substance, quality, cause, or effect. If we think of the soul, we think of it as an entity possessing capabilities and powers. Thus individuality, identity, and activity are attributes of the soul. If we think of the Creator, we think of him as a being having an objective existence and as having certain attributes, such as infinity, omniscience, omnipotence, and omnipresence; and so of everything else, whether it be an object of sense or not, it is an object of thought, referring to something thought of. In every sense-perception there must be two opposite poles of a relation: the percipient mind on the one side, and the object perceived on the other. Hence, without an object there can be no perception, and without perception there can be no thought, and without thought there can be no such act of the soul as that of dreaming. As all the data of our sense-knowledge are obtained from the external world through the senses of the body furnishing the necessary elements of thought, where such data are absent, thought is absent. For this reason the unborn

infant, having no such data, can not think, can not dream. Every object of sense is presented to us under certain relations, such as its relations to us, to one another, to space, time, cause, and effect. We can not think of an object except under some one or more of those relations. Every thought must therefore be predicated upon an object of some kind as its conditionate.

There are two classes of phenomena that fall within the range of our observation and experience: the phenomena of matter and the phenomena of mind-the one corporeal, the other psychical. The one class is material in its nature, the other spiritual. When awake, we perceive only material objects; when asleep, we perceive nothing but thought-objects. In the totality of our experience, therefore, the conscious soul carries with it a dream life as well as a waking life, a dream phenomenon as well as a physical phenomenon. Both classes are forced upon our attention; both are alike perceived. We could not turn away from either if we would. We can not dream without an object appearing to the inner senses of the soul. We say, to the inner senses of the soul; for when the outer senses of the body are awake it is not the organ of sense that sees or hears, but the sentient principle that constructs these organs and resides within them, giving to each its office and functions. One class of objects here referred to can be perceived by us only through the aid of the sense-organs; the other class can be perceived only when these organs of the body are in a state of complete inactivity or rest, as when the nerves of sense are asleep.

In that state of the mind known as dreaming, thought and phenomenon are inseparably connected together; hence to think in sleep is to dream. Whilst in this state, we can not entertain a thought without an object, nor an object without an originating or sustaining thought. Both are the necessary concomitants of each other. One is an act of the soul, the other the accompanying product of this act. In every act of thought the soul produces that particular phenomenon to which the thought has special reference. As a comprehending act, the thought-phenomenon is both apprehended and perceived. The act of forming a thought in the mind is therefore the productive act of the phenomenon which appears in direct relation to and connection with it. The soul can not produce one without the other. For this reason both are inseparable acts of mind. We can not dream without thought, nor form a thought without producing an objective phenomenon in relation to it.\* This being the fact, the phenomenon must change with every change of thought. thought is simple, so is the phenomenon; if the thoughts are complex, so are the phenomena that attend them. There is, in fact, no more difficulty in the soul producing the phenomenal object than there is in its producing the thought to which the phenomenon has re-

<sup>\*</sup>The true philosophy of the dream-phenomenon will be given further on.

lation. The phenomena, then, which are presented to us in dreaming are as much a product of a power or faculty of the soul as are the thoughts to which they stand related. We can no more prevent the phenomena from appearing than we can prevent the thoughts from arising; for the soul is alike parent of the subjective thought and of the objective phenomenon. It is by means of this class of powers that we are enabled to reproduce facsimiles of the phenomena of the external world in sleep and dreaming. At all times, and wherever it goes, the soul carries the phenomenal transcripts of the world with it, and may reproduce them over and over, again and again, onward and onward forever, independently of any immediate connection with the nervous system. Inasmuch, then, as these acts are not immediately dependent upon the functions of the nerves, and inasmuch as they can have no practical bearing upon the requirements of the present life, they must have reference, more particularly, to a life of the soul hereafter. But of this anon.

While engaged upon this branch of our subject, let us give a few moments' attention to another question in relation to dreaming which is of the highest importance; viz., Have the phenomena that are presented to us at these times a real existence around the soul? This question is based upon another, Have the thoughts of the mind any real existence? As both are only momentary in their duration, if the thoughts can be said to have an existence, the phenomena have; for the same

evidence that may be adduced in favor of the one may be brought forward in support of the other. In this respect both may be said to stand on an equal footing. The question has often been asked by metaphysicians, Do material phenomena exist? This question has been warmly controverted by numerous philosophers of high repute. The same evidence that may be adduced to establish the existence of the material phenomenon may likewise be brought forward in support of the existence of the dream-phenomenon. In this respect the two orders of phenomena are placed precisely in the same category. Thus, in dreaming, we are conscious of our thoughts, and no other evidence short of the testimony of our self-consciousness can be adduced in support of the existence of thought. We are also conscious of the existence of phenomena surrounding us, which are the accompaniments of our thoughts, as attested by our perceptions of such phenomena and by their influence upon us in arousing, at the time, sensations and emotions in the soul. These sensations and emotions are not brought about, as we expect to show, through the nerves of the body, but entirely independent of them.

As consciousness speaks to us with no uncertain authority when applied to metaphysical research, and as we have no other authority by which to establish the existence of the thoughts of the mind, whether awake or asleep, or to distinguish them from each other as they come and go, but our own self-consciousness, let us place this witness upon the stand for the purpose of ob-

taining definite and reliable information in regard to all the facts pertaining to these operations of the mind. If we interrogate this witness in regard to the mental phenomenon in dreaming, we are assured of not less than six separate and distinct facts, as follows: First, the consciousness that we exist; second, that the mind is engaged in thought; third, that the trains of thought have reference to some particular subject occupying the attention at the time; fourth, that we are often conscious of experiencing certain emotional feelings at such times; fifth, that we are conscious of seeing, hearing, feeling, tasting, etc.; sixth, and lastly, that we are conscious of perceiving phenomena around us on these occasions, and are often enabled to give a clear and distinct description of them in reference to the position they occupy in relation to us and to one another. Now, if our consciousness is an acceptable witness, one whose testimony can be safely relied upon in establishing each step of the dream-process, it must be equally authoritative in the last; viz., in establishing the fact of the presence and existence of the surrounding phenomena which we perceive whilst in this state; for if we should once invalidate the testimony of self-consciousness in regard to any fact whatever, as in the case of our thoughts or the existence of the objects perceived, we at once invalidate its veracity as a truthful witness in regard to each and all the other parts of the dream process, which would involve the whole operation in one interminable skepticism; not only so, but in a complete Nihilism of the soul and all its phenomenal operations. For, as heretofore mentioned, as runs the legal brocard. Falsus in uno, falsus in omnibus. If the witness's statement in regard to one class of facts pertaining to the question at issue is found to be uniformly and persistently contradictory and false, it casts a suspicion of falsehood upon all its deliverances, especially where there is no other witness, nor circumstantial evidence that can be adduced to corroborate the testimony in regard to the other facts in question. If, in dreaming, there are no phenomena present, as objectively surrounding the soul, then there are no perceptions of such phenomena in the mind of the dreamer, and, if no perceptions, no thoughts, no emotional feelings, no consciousness; in short, no such thing as a dream. Nor can we establish the fact of the existence of the mind which, at these times, is supposed to be employed in dreaming, for the reason that the authority we have in support of these operations has been found, by a sweeping denial of its deliverances, to be uniformly deceptive and false. Our consciousness is the only true criterion that we can adduce to establish the existence of any fact, either of mind or of matter, during the waking period. It is, indeed, the only authority we can appeal to at any time in support of the existence of any of our sensations, emotions, or thoughts, when awake. If, therefore, we should invalidate its authority or capability to establish any of these facts belonging to the waking hour, we would then be entirely unable to prove any

existence whatever, either of mind or of matter. Let this authority, then, be once fairly impeached; let its falsity in regard to any one of these points be once established, and it might be maintained beyond even the power of successful contradiction that there is no mind, no world, no soul, no God! According to the legal brocard, we must either accept all the testimony disclosed by our consciousness, or reject all; for we have precisely the same evidence to offer in support of the existence of the objective phenomena that appear to us in dreaming that we have in support of the existence of the phenomena of the material world. In regard to the existence of both classes the evidence is the same and the witness the same. Deny the existence of the former as objects of our perception, and you completely undermine the evidence of the existence of the latter. We are bound to accept the existence of both classes alike, or Nihilism. We can not dodge nor gainsay this impending conclusion; for there can be no sense-perception without a phenomenon of some kind standing in immediate relation to the sense. "Destroy the phenomenon," says Sir William Hamilton, "and you destroy the perception in relation to such phenomenon." Every perception, then, whether awake or in dreaming, must have a phenomenon presented to the sense in order fully to awaken such perception in the mind of the dreamer; hence, in this state, the same as when awake, the perceptions change with each change of phenomena, and vice versa. It must not be forgotten

that, when awake, it is not the outer senses that perceive, but the personal sentient principle that resides within them.

Sleep may be said to serve a twofold purpose: first, to furnish us with an opportunity to rest and recuperate the nervous system; and, second, to unfold to our observation a class of mental operations and laws, with their attending phenomena, which are entirely concealed from us when awake. In the waking state this class of phenomena sometimes appear to the insane, with whom there are visions or hallucinations of objects of sense that no arguments can satisfy or induce them to disbelieve their existence. In cases of this nature, where certain morbid conditions of the brain and nerves of sense arise, the mind often fails to operate connectedly with its instrument and with some one or more of the organs of sense; hence the insane have hallucinations of sight and hearing in which the same class of mental phenomena appear to them that appear to every man in dreams. And as we all believe the objects that appear to us in dreaming to be, at the time, real—i. e., material objects—so the insane believe their perceptions of hallucinated objects to be real; hence the insane man often sees and hears what no other man sees or hears in the waking condition of his nervous system, for the reason that the hallucinated object and the dream object are one and the samespiritual in their nature. The object of hallucination is generally more persistent or enduring in its nature

than the dream object. Our consciousness, then, is no false witness when it verifies to the insane the presence of an object which, on account of the failure to exercise the rational faculty, they are unable to distinguish from corporeal objects. The insane, like the sane man, always relies upon the testimony of his senses, as verified by the authority of consciousness. While dreaming, we all believe that the objects which we perceive are material because our experience is with objects of this kind, and it is not till after we awake that we are enabled to correct the error as to the material nature of these objects.

The phenomena of dreaming have been supposed by many to be simply the workings of the imagination, and, hence, that they have no existence as objective phenomena; that our thoughts are not attended by any phenomena or sense-signs; that these only appear to us as objects, but do not in reality exist. The term "imagination" is derived from the Latin, imaginatio, which comes from imago, signifying to image. The universal acceptation of the term "imagination" is, therefore, an admission that the mind has the power of imaging, or in some way representing in thought the objects of the external world. Without this power to represent the world in thought, the sculptor would be unable to shape the block of marble into the various forms of animated objects. Take away this power of the mind to form images of objects, and the hand of the painter would fail to guide the brush so as to represent the

various objects of a landscape, or delineate in lifelike expressions the different forms of the human countenance. Can the mind, then, portray the phenomena of external nature? If it can represent natural phenomena upon canvas, dreaming clearly demonstrates to us that it has a much shorter method of portraying the phenomena of the material world in objective thought or scenery than it has in representing them upon canvas. When awake, these inner pictures of thought are not observable to us, but nature has carefully provided for their disclosure by putting to sleep the nervous system, so as to bring them to our notice in dreams.

The reader will no doubt assail our position by declaring that we are advocating a mechanical theory or trigonometry of thought in supporting the existence of lines and surfaces to identify the different objects brought to view in dreams. But, unlike the objects of external nature or the paintings on canvas, the lines and surfaces pertaining to the objects of a dream last only with the objects or only as the momentary thoughts of the mind sustain them, and then these lines and surfaces disappear, to give place to other thoughts and other phenomena. Reid, who for a long time was supposed to have put such questions as the above entirely to rest, triumphantly asks the question, Can a thought, an idea, or an affection—such as joy, fear, hope, etc.—be quartered, halved, or divided into parts, like that of material objects? We answer, No. But in dreaming (a state in

which the phenomena always appear as the embodiment of our thoughts, as products of the mind), if we should entertain an idea pertaining to the fractional part of some object, such fractional part will instantly appear in response to the mental action. Thus, in dreaming of a triangle, the triangle may be separated by the mind into one of its sides, or into two, and these again may be brought together so as to represent an acute angle, or any angle that we may at the time entertain. we dream of a field, we may halve or quarter it, as the case may be, and so of any object. It is not the mental act or thought that appears, but the phenomenon objectively produced in response to the thought. which we call joy, hope, hatred, and fear are not pictures of objects of any kind; they only denote various degrees of our feelings, which are expressive of different states of the soul, and consequently do not appear in dreams as forms of external things. They are simply varied states of our feelings, and not subject to be divided into fractional parts.

As the dream phenomena have been denied by the metaphysician, the physiologist, and others, as having any existence distinct from the mind that produces them, so have metaphysicians and philosophers repeatedly attempted to set aside the real existence of the objects of material nature. In support of this view it has been claimed that the phenomena of the material world have no other existence than simply as a physiological product of our nervous system. Many philos-

ophers hold that the optic nerve furnishes, as a physiological phenomenon, the only light and colors which we perceive in nature; that outside of the eye and ear there is no such thing as either light or sound in the character in which we perceive them; that independently of these organs all nature is both dark and silent. They maintain that light, colors, sound, are the sole products of the optic and auditory nerves. This form of idealism has been entertained by many physiologists and philosophers of the highest repute. But the limits which we have here marked out will not permit us to enter at length upon this branch of physiological and metaphysical inquiry.

In dreaming, we not only see the phenomena that surround the soul, but we perceive the soul itself. fact is patent in those who have sustained a loss of one or more of the limbs by amputation that the soul in dreaming sees and feels its limbs as present. Though years may have elapsed, it never finds itself compelled to make use of crutches, but always produces within itself the sensation of walking or running, the same as when the body is awake and all the physical limbs present. Hence the soul on these occasions always appears perfect, both in regard to form and sensibility. No accident occurring to our bodily structure at adult age (short of the complete destruction of life) ever appears to mar or abridge the powers of the soul during the dream exercises. I might here parenthetically remark that we never see the physical body, nor the physical

world, while dreaming. It is the personal soul that dreams, and it is the personal soul that appears to us at these times. But more of this anon.

When engaged in the exercise of thought or contemplation during the waking hours, we do not feel any special sensations in our bodies, such as accompany the perceptions of material objects; but in dreaming we always experience sensations as the accompaniments of our thoughts and the attending phenomena. All the sensations which are experienced by the soul through the organs of the body when awake are reproduced and re-experienced in the reproduction of thought during the dream-hours. These sensations take place even when one or more of the different sense-organs of the body, through which the waking sensations and perceptions were originally experienced, are paralyzed, mutilated, or completely destroyed. If we close our eyes when awake, and attempt to represent an external scene of any kind, we may present it very correctly in our thought-conception; but we do not experience, at such times, any accompanying sensations in the soul connected with these thought-exercises. It is well known that in the waking condition we experience special sensations in the body only when objects are acting upon our organs of sense, while in sleep and dreaming the soul, not being then muffled, so to speak, by these organs, experiences sensations accompanying the thoughts independently of any or all the organs of the body. When awake, all our sensations proper take place within the

organic; but in dreaming (a state in which the nerves of the different senses are asleep) all our sensations and perceptions of phenomena are *supra-organic*—hyperphysical. In the former case, the sentient powers of the soul, being, as it were, muffled or blunted by their connection with the nerve-cells of the bodily organs, are tempered to suit the gross objects of external nature, while in the other its powers of sense are greatly heightened and so graduated in their intensity as to be adapted to the highly-attenuated mental phenomena that pertain to the dream state.

Having considered some of the objections which might be raised against the view we have taken in regard to the independence of the soul over the brain and senses during the dream-state, let us now turn our attention to another important branch of this inquiry.

Dreaming appears to be a separate and distinct operation of the mind, differing greatly from any operation which takes place in the waking condition of the organs, so different indeed, that it is utterly impossible for the organs of the body to keep pace with the mental operations. If, however, we should adopt the views of Sir Wm. Hamilton, that the soul [mind] is not capable of either thinking, imagining, or of dreaming, without thalami—without making use of some one or more of the nerve-centers of the brain—in short, that it is not capable of setting up any action whatever independent

of the brain and nerve-centers, I say, taking this view of the psychical powers, an uninterrupted or continuous existence of the soul and its operations would be impossible without an intimate connection with the nervous system, without, as Sir Wm. Hamilton expresses it, the nerve-centers or "thalami." Viewed in the light of such a theory, the soul of that much-lamented philosopher would, on the grounds of his own hypothesis, be at this moment resting under a cloud of complete unconsciousness. But if, per contra, we are to regard the soul as immortal, it must be on account of a class of laws which are capable of continuing their action independently of the organs of the body; and if such a class of laws exist, they are undoubtedly placed within the reach of our comprehension and discovery. But as every attempt that has been heretofore made to prove the immortality of the soul by means of its operations in connection with the organs of the body, as in the waking state, has been a complete failure, we must search for this class of powers in those operations which spring up independently of the bodily organs. We feel confident in asserting that it is only in the laws and phenomena of dreaming that the independence of the mental operations over the organs of the body can be established. If to think in sleep is to dream, dreaming is undoubtedly as natural an operation of the mind as are the waking operations. The dream-operations are not only natural, but unavoidable; and he who would regard this subject as entirely

unworthy of his attention must, in order to be consistent with himself, quit dreaming. Let him at least make the trial, and if he should fail in his attempt to accomplish it, I would then suggest that he give the subject a more faithful and earnest attention. For it is hardly probable that the Creator would have endowed the soul with this special class of powers simply to frighten man by engaging in nightly sports with his intelligence.

While we admit that we can not establish an underlying essence to the dream-phenomenon, aside from its source, which is the mind; neither can we establish the fact of the existence of an essence underlying and giving support to the material phenomenon, aside from the sustaining power that formed it. In this respect, both classes are precisely alike; in both cases the existence of an essence rests on supposition only. As the lightning that proceeds from the electricity of the cloud, and casts momentary illumination upon the earth may, or may not be, as far as we have any means of knowing, devoid of an essence; so the phenomena of the mind, that appear as the accompaniments of our thoughts, while dreaming, may have no other sustaining support than that of the mind which produces them. The transient light from the cloud is an object of our visual perception, and so are the phenomena that appear in a dream. Which are the more subtle of the two, the phenomena of light or the phenomena of mind? Both are alike transient; both produce an impression upon the senses—one upon the outer senses of the body, the other upon the senses of the soul. In both cases the fact of the existence of the phenomenon perceived rests upon the integrity of our consciousness, while, in regard to both classes of phenomena, the fact of an underlying essence rests upon mere supposition. In this respect, both classes are alike—both are in the same predicament as it regards the inability to prove the existence of an underlying essence.

It has been elsewhere shown that we are limited in the production of the phenomena of mind in dreaming by the extent of our waking perceptions; in other words, that the combinations of thought, which form the imagery of our dreams, depend entirely upon original sense-perceptions. This fact was abundantly set forth when referring to the absence of certain phenomena which take place in those cases where deafness and blindness have existed from birth. The former can no more dream of sound, nor the latter of light and colors, than the unborn infant can represent in a dream any of the great cities of the world. The fundamental laws of the soul governing such cases are, in this respect, as definite and unalterable as are the laws that govern the movements of the planetary system. In dreaming, the mind commonly reconstructs the objects of sense in a more or less confused and irregular manner, for the reason that, in those operations, we are limited to our former perceptions of external objects; and, being deprived of the co-ordinating power of the will, the rise of thought generally takes place without any due system of procedure; hence the failure to reconstruct the mental objects in the order in which we originally perceived them when awake. Thus, if we should dream of the fabulous mermaid, it is because, in the rapid flight of unco-ordinated thought, we are presented simultaneously with two distinct ideas—that of a woman and of a fish; and, by the sudden blending of these ideal concepts into a single thought-conception, we are instantly confronted, in the confused array of the mind's objective imagery, with the noted nymph of fable:

In dreaming of an orange, we synthesize or reproduce, in our mental operations, all the simple sensequalities that enter into the combination of the orange; and so we may dream of a peach simply by the mind making the necessary changes of the different sensequalities of the former fruit into those which are requisite to make up the proper combinations of the latter, thus changing the thick, corrugated rind, color, juiciness, flavor, odor, etc., of the former into the qualities and flavor of the latter. So, if we should dream of eating an orange or a peach, we experience the same sensations and respective perceptions of flavor, etc., awakened and apprehended in the soul, that are perceived when the above fruit is brought in contact with our nerves of sense in the waking state of the bodily organs. The act of dreaming is, therefore, simply a repetition or reproduction by the soul of all the

sensations and perceptions of our waking life. We are apparently living our life over again!

In the waking state, there is no exercise of the mind that is more commonly carried on than the combination and recombination of ideas. These combinations take place in more or less true logical order, while in dreaming they are very frequently destitute of this order, being then governed exclusively by the laws relating to the association of ideas and the mental law of suggestion, such as the appearance of one object suggesting to the mind another. Were the will in operation on these occasions, co-ordinating the thoughts of the mind, as in the waking state, the presentation of the fabulous mermaid above mentioned would not have taken place, unless, indeed, it had been purposely directed through the aid of the voluntary faculty, in which case we could produce, not only this object, but any other similar combination of thoughts and objects at the pleasure of the mind. In all such cases, however, we should be as much compelled to make use of the familiar qualities of external objects of sense in the formation of every new combination of ideal images as we are compelled, in the written formation of words, to make use of the letters of the alphabet. In dreaming, all the operations of thought are brought to view as they combine and recombine in the alembic of the mind; but in all our mental combinations, we are, at such times, mainly limited to the phenomena of sense-knowledge; and hence we can dream only of

what we know. As an illustration of this, what man could have represented, in a dream, a steam-engine before it was invented by Watt, or Hoe's printing-press, with its numerous cylinders in rapid motion, throwing off their twenty thousand impressions per hour, before the invention of the steam-press? Or who could have represented in a dream Morse's telegraph, or a locomotive and train of cars, in their present state of perfection, one hundred years ago?

Let us now pass to the consideration of another very singular but highly interesting part of our subject; viz., the remarkable power displayed by the soul in what may be called excursive dreams. While dreaming, we often seem to be journeying from one point to another, and from one country to another, when, at the same time, the soul is connected with the body, and the latter quietly reposing upon a bed of sleep. Let us give a few moments consideration to these remarkable operations, and see if any satisfactory solution can be given in regard to such transactions as those which the soul—not the body—appears to be performing during the fleeting hours of sleep. It is through the exercise of thought that the soul dreams, and every train of thought is accompanied with such objective scenery as will delineate some particular place that we seem at the time to be occupying. When awake, we become familiar with places only by means of certain objects that designate them; but in sleep the space which we seem to be then occupying is filled up solely

by thought-phenomena, so that, as our thoughts change. they always present us with changes in the surrounding scenery. For this reason every essential change of objective scenery represents a different place from the one which we had previously occupied. Thus, changes of thought are attended with changes of scenery, and the change of scenery represents, as it were, a new place corresponding with the character of the scenery presented, for any particular place can be designated only by the objects it contains. The phenomena attending the succession of thought not only represent a portion of space, but each succeeding concept of thought and place represents a succession of time. Thus, if our thoughts revert to some part of our former life, we represent in our dream both the place and the period referred to, so that, in the rapid flight of thought which takes place at these times, we have both time and space successively presented to our view. In these rhythms of thought, time flies during the transactions of a dream with the same rapidity as that with which the thoughts of the mind succeed each other. Every successive change of scenery therefore represents a change of place, and every change of place represents, as in the waking state, a movement through some part of space. So in regard to time we have no other means of determining a true standard of time than that which is observed to take place in the changes of thought-phenomena, for at such times the course of external nature is completely concealed from our observation. The space through

which we appear to be traveling, and the time which seems to be required to perform our journey, are then measured by the numerous transitions which crowd upon us, coupled also by the experience which we have had in like performances when awake and operating in connection with the bodily movements. At such times we generally represent ourselves as occupying a different place from that of the chamber in which the body is reposing, and as undergoing constant changes of place by the constant change of scenery which the mind presents to our view.

But to present this subject in a more familiar way, let us suppose that in a dream we set out to visit some particular place, say, if you please, the Queen City of the West. If we dream of seeing a city, the latter is at once presented to our view, because in that case we do not entertain any idea of intervening space separating us from the object thought of; but where such an idea as that of intervening space is dominant in the mind, we must set about to overcome the space so entertained. How, then, is this to be accomplished? At the outset of our proposed visit let us suppose that we select the cars as our mode of conveyance, representing in thought the place of starting, which, for convenience of narration, we will call our premises. Let us suppose, then, that by a regular rise of thought we represent successively in the dream the buildings, pavement, fences, and trees, until we reach our depot. Now, if our trains of thought are not disturbed by any irrelevant interludes,

such as may serve to divert us from our original intention, we will be very apt to find the hissing locomotive and train ready for moving. As the mind creates all its own surroundings, so we find our place in the car, the bell rings, the engine whistles, and off we go, feeling subjectively in the soul-not in the sleeping nerves of the body—a class of sensations like that of the vibrating motions of a moving train. To dream is not simply to think, see, and hear, but also to feel. We not only represent the car in motion, but furnish it with personages, giving to each a separate and distinct vocal expression. And while seemingly engaged in promiscuous conversation, we personate each one by a different class of features, as well as a different tone of voice. In case there are no disturbing influences to break up the chain of this moving panorama of thought, we daguerreotype, as it were, trees, fences, farms, landscapes, etc., with more or less rapid succession until we arrive in thought at the place of our destination, which we readily designate by the surrounding appearances at once projecting in phenomena of thought the city in dream or vision. The streets will appear lined on either side with buildings, and filled with a busy multitude of moving forms. Instead, now, of experiencing in the soul that class of sensations which a moment before had accompanied us on our moving train, we have the sensations of walking on pavements of brick, wood, or stone. Each moment, as it flies, is accompanied by a class of sensations that tally with every important

change of thought and scenery. If during these exercises of thought and memory we conclude to visit the Esplanade, this part of the city with its fountain will at once appear; and, as dreams constitute a certain part of our experience, we will be apt in that case to feel sensations of falling spray descending, as it were, like gentle distillation upon the sentient and respondent soul, because everything which we then experience, both in thought and sensation, makes up a part of the web and woof of our dream-life. But while the soul is thus experiencing the different sensations attending the changes of scenery and place, it is at the same time connected to the body by another class of its powers—the unconscious, instinctive—which prevent it from moving one iota from the place or couch upon which its unwieldy partner is reposing in sleep. Hence, while one class of the psychical powers are repeating the operations of our conscious life, the other class, whose instinctive action is unremitting, continue to maintain the various functions of organic life. These different psychical operations are not, however, so independent of one another as to be wholly free from all disturbing influences upon each other. For instance, where the unconscious powers become disturbed through morbid influence operating at any part of the system, this painful influence, being felt by the sentient soul, gives rise to more or less disturbance to the course of the dreamthoughts; hence one of the frequent diversions which so often takes place in dreaming. To illustrate, if the

vital functions suffer seriously, as is sometimes the case in severe forms of febrile disease, we often have more or less disturbance of the mental operations, and vice versa. Hence any great emotional excitement may, by its general depressing effect upon the soul itself, instantly overwhelm and completely break down the vital functions, resulting sometimes in immediate death. In sleep these disturbing influences are not transmitted through the ganglionic system of nerves to the sleeping nerves of the brain, but are felt directly in the sentient, personal soul itself, for it is not the nerves that are sentient or that feel on these or on any other occasions, but the personal, sentient principle that resides within them and animates the nerves of the several parts, and thus through its differentiating powers gives to each part its own particular sensation and function. It is the office of the soul to feel, and the body, as its instrument, to respond through subtle agents generated in the nervous system by the decomposition of nerve-cells formed for such purpose. But to return:—

During an excursive dream the mind presents to its own observation a moving panorama of phenomena accompanied with sensations of motion so similar to the waking state, that, as the panoramic scenery of our thoughts successively change, we seem to be moving through a portion of space corresponding to the changes in the scenery presented. The soul thus repeats, more or less distinctly, those thoughts and sensations which it so often experiences in connection with the sense-

organs of the body, when these organs are awake, so that we are at such times really living our life over again in an inner and spiritual way. Indeed, so faithful is the mind to repeat the past on these occasions, that it actually imposes upon itself, for it always appears to us that we are awake and acting upon the organs of the body in relation to the physical world. We never suspect, when we are dreaming, that the soul is capable of performing such a wonderful work as to represent the objects of the material world in such a manner as to be able to reproduce all the attending circumstances and sensations pertaining to our physical life. In order fully to understand these operations of the mind, we must, immediately upon awaking from sleep, review the course of our dream before the waking thoughts intrude upon us, and distract us from the fleeting panorama which had just closed upon our attention. must take an immediate retrospective view of the different senses which were brought into play at the time, so as to recall through our remembrance the varied sensations that attend the different parts of the dreamoperations—such as that of seeing, hearing, tasting, smelling, feeling—both general and tactile. In this way we shall often be enabled to recall many of the occurrences, both subjective and objective, that spring up in the course of our dream exercises.

Thus by a careful retrospection of the different parts of the dream-excursion, we will find the same kind of sensations arising within us that we experience in our

journeyings when awake. Not knowing, at these times, that we are the originators of the objective scenery, and feeling the same sensations that usually attend upon the presence of physical phenomena, our judgment is imposed upon; we have the appearance of moving through space, when in fact our bodies are at rest—the mind alone furnishing the sensations and the objective scenery. We often experience a somewhat similar deception to this in our waking moments, as when we are in a boat pushing out from the shore, not feeling the motion of the boat, the shore and its objects appear to be moving away from us, when in fact we are in motion, and the objects on shore are stationary. So in regard to our motion in space, the sun, moon, and stars appear to rise and set, while in fact they are stationary, and we are in motion; but, not feeling the movement of the earth, our judgment (unless based upon proper reflection) is imposed upon. In both these examples it requires an act of reason to dispel the illusions of the sense; but in dreaming, our reason can not be brought into requisition for the want of the co-ordinating influence of the will: hence we can not correct the errors which the mind falls into at such times. But the errors to which we here allude, belonging alike to the dreaming and waking states, do not in the least invalidate the integrity of our consciousness as reporting the presence of objects. The error which we labor under at the time is an error of judgment, and not of the sense and consciousness. We have here two orders of phenomena

presented to us alternately—the one, being material, is stable and fixed in its nature; the other is spiritual, or rather psycho-spiritual in its nature, and hence is constantly changing as the thoughts of the mind change. Whenever, therefore, the percipient mind is suddenly and imperceptibly wheeled from the presence of the former class of objects into the presence of the latter (as when passing from wakefulness to sleep), it views everything presented to the sense as from a physical standpoint, and accordingly attributes to this new order of things the same laws as those which pertain to external nature.

As all the phenomena of dreaming are dependent upon the mind, appearing in perfect parallelism with its thoughts and sensations, if in these exercises the will were exerting a control over the mental movements the dream excursion referred to above would have proceeded with as much regularity as like movements in the waking world, but with greatly-increased rapidity. We should under such circumstances be able to stop at any point of our procedure, and dwell upon the thoughts, the objective scenery, and the subjective sensations that spring up within us. in consequence of the presence of the former, the same as when awake. would be in this inner life of the soul as perfect a realization as that which the waking state affords; but everything would be conducted in a purely spiritual manner. Nothing would appear to us at such times but the soul with its emotions, sensations, thoughts, and their attending phenomena. This class of mental powers, however, can not attain to their highest order of perfection whilst the soul is connected with the body, on account of the sleeping brain exerting in some mysterious way a restraining influence over the operations of the will, as is shown to every one in the quasi-spiritual state of dreaming. In the waking state we can perceive only in our bodies, and hence must go to the place where the objects are in order to perceive them, while in dreaming this order is reversed, the soul furnishes the objects to us in the form of a vision. And were we capable of reasoning at these times, we might, by a process of the abstraction of ideas, restrain the flow of thought so as to stop at any point of our procedure, and contemplate—for an hour at a time—the objects of our dreams.

There is a mixed state of dreaming and waking, known as somnambulism, in which some of the bodily senses are asleep while others are awake, connecting us at the same time with the waking-world and with the dream-world, which we shall consider further on.

Although dreaming is a common exercise of the mind—one which has occupied a very large share of every man's time that has appeared upon the stage of action—yet there is perhaps no subject within our immediate knowledge that has received as little attention from a true, scientific point of view as the one before us. As a class of mental operations, these powers have been held in universal contempt, and as being of little or no utility to us in any practical way. But notwith-

standing this general neglect and widespread contempt on our part, these powers have been shown to be of the highest practical importance by the beneficent Author of our being. When we consider the large amount of our time which has been spent in these exercises, and the little estimate that men have placed upon them, we are the more reminded of the importance bestowed upon them by their selection and approval as a suitable medium through which to communicate a special revelation to man. It is remarkable, indeed, that the brain and sense-nerves should have been first put to sleep, and that the state of the mind known as dreaming should have been selected, in preference to the waking state of this organ, in order to make known to us important facts in regard to a future state of existence; and yet such has been the case. Whilst man has constantly, and I may say persistently, underrated this class of his mental operations, the Creator has honored them with the highest degree of importance. Indeed, these operations, when brought under the controlling influence of the will, far outstrip those of the waking state. Could we always reason in our dreams, we should then have a deliberative, spiritual state of the mind wholly unattainable by the use of the bodily organs during the waking period.

A revelation communicated to the soul in sleep must proceed upon the basis that the consciousness may become the recipient of knowledge at such times, and that there are other senses which may be called into requisition besides those of the body; and also that these senses may be the recipient of other phenomena besides the material. It is a well-attested fact that our intellect is percipient of a certain class of phenomena while asleep and acting separately from the brain and bodily senses, of which the latter senses receive no impression. The principal reason, no doubt, for selecting this condition, in preference to the waking state of the brain and organs of sense, is that in external nature everything proceeds in accordance with fixed laws; while in dreaming, a phenomenon of any kind-it matters not how strange or how remarkable the phenomenon to be adduced—may be instantly produced simply by evoking the natural laws of the soul, a class of laws that are being constantly presented to our observation when the body is asleep. In these operations phenomena of the most extraordinary kind and character may be produced in a moment of time without offering the slightest disturbance to the quiet order that reigns in external nature. Hence dreaming or vision, as it is sometimes called, has been generally selected, whenever any remarkable occurrence or display of phenomena was intended to be presented to the eye of the prophet or seer. There are, then, two very different classes of phenomena and of inlets by which the consciousness may be approached; viz., the outer senses which belong to the body, and which place us in connection with the phenomena of matter; and the inner, which belong exclusively to the soul. Even when awake it is not the

external organs of the body that see and hear, but the sentient principle that resides within them and uses these organs only as an instrumentality. All revelation made to the soul when the body is asleep, as in dreams or vision, proceed on the principle that there are senses in the soul that are capable of being addressed by a peculiar class of phenomena suited to their nature. In support of the existence of this class of senses and of their perfect reliability to attest the presence of objects, we have a twofold class of facts; viz., the scientific facts of our consciousness, which are the only data we have for the science of mind, either asleep or awake, and the authority of revelation. But more of this again.

We have elsewhere shown that to think in sleep is The blind to dream; but every dream is not a vision. from birth see no objects in their dreams; they experience only the sense of feeling, tasting, smelling, and hearing. The phenomena of these senses spring up with their thoughts and emotions of the soul, but this is not vision. There is no vision in the proper sense of the term, except where the sense of sight is addressed in connection with the other senses. In dreaming, the mind can reproduce only such phenomena as it has acquired through the different sense-organs of the body. Where, therefore, light and colors are unknown to the individual, they can not be presented to view by the soul in sleep; for the colors that appear to us in the dream state are thought-colors-spiritual resemblances of natural colors; they are the phenomenal productions of

mind only. But phenomena of this kind can scarcely be conceived as being less subtle than the phenomena of light and colors in external nature, and they are quite as real to the soul, which is in fact alike percipient of both classes. But those who are deaf and blind from birth would not be likely to be chosen as a suitable medium in cases of inspired dreams. With this class of individuals there would evidently be a want of suitable qualifications or fitness of mind through which to transmit a revelation of this kind, on account of a want of proper training in the school of external nature. As in the case of the blind boy described by Dr. Cheseldine, who, after being suddenly restored to his sight by an operation for cataract, and who, being destitute of all knowledge of light and colors prior to the operation, thought, when restored to sight, that all visible objects came in contact with his eyes. Nor could he be induced to believe otherwise until this sense had received a course of training in connection with the other senses of the body. As the blind from birth, then, never see objects in dreams, nor the deaf from birth hear sounds of any kind, the supernatural order of visions must be of very rare occurrence with such individuals, if indeed it should ever occur. This class of persons would, on account of a deficiency of some one or more of their senses from birth, be, no doubt, disqualified as a suitable medium for transmitting knowledge by means of inspired dreams or visions.

## CHAPTER II.

## MAN, A MICROCOSM.

"On Earth, there is nothing great but man; In man, there is nothing great but mind."

AN has been, not inaptly, termed a microcosm, - or little world, in contradistinction to the macrocosm, or great world. The relation of man to the macrocosm is not so strikingly exemplified in the composition of his body as it is in the nature and powers of the mind. In regard to the composition of his body, man holds an intimate relation to the chemical elements of the world, while by means of sense-perception he holds a direct relation to the phenomena of the world. That which we perceive by means of our organs of sense is only phenomena—the appearance of things; we can not perceive noumena, or essence. We suppose the existence of an underlying essence as a support to the phenomena, which alone are capable of affecting the sense-organs of the body and the mind. Thus limited to the perception of phenomena, we are limited to the perception of appearances only, and not to the real things themselves. That which gives real substantiality to things is their underlying essence, which to us has only a supposable existence. We suppose the existence of an essence in order that we may account for the presence of the phe-

nomena which alone are cognizable to sense. The mind through sense-perceptions takes off copies or, as it were, transcripts of the phenomena of the material world, which copies or transcripts, as they are sometimes called, are reproduced and represented to us as objects of sense by the operation of certain laws of the mind in the phenomena of dreaming. In our perceptions of the external world, then, we have presented only the phenomenal appearances—not the essence—of things; while in our perceptions of the dream-phenomenon we are confronted with the productions or mental copies—transcripts, representing the appearance of things, not the essence. One class of phenomena is known as the material, the other as the mental or psychical. The former class is prototypal, the latter ectypal—copies of the former. In the phenomena of dreaming the mind brings to our notice a class of mental powers, the existence of which are unobserved in the waking state. In the one class. the laws are physical; in the other, psychical. In the one, the phenomena are more or less stable and fixed; while in the other, the phenomena are constantly changing their appearance with the ever-changing thoughts that produce them. Through the senses of the body we perceive the physical; through the senses of the soul we perceive the psychical—copies of the physical. the latter we behold the phenomena of things pictured in colors of mind. Psychical phenomena would generally appear to us in the same order as the former, if the will were in exercise at these times, giving due order

and regulation to our thoughts. As we expect to show presently, the mind duplicates the objects of external nature, not simply by representing them upon canvas alone, but by means of the more ready and instantaneous laws of thought.

Of all the operations of the human mind, there are perhaps none so mysterious or difficult of comprehension as those pertaining to the phenomena of dreaming. While dreaming has always forced itself upon the attention of every man in all ages of the world, and while this state of the mind, which belongs to a distinct class of our mental operations, has been so universally recognized by the great mass of mankind, yet there is perhaps no class of our mental operations that has been so entirely neglected and so little understood. Indeed, such has been the general confusion and misconception attending the numerous attempts to explain this class of our mental powers, that the whole subject has fallen into neglect, and even utter contempt. So great, indeed, has been the intricacy attending the investigation of this subject that psychologists have been baffled time and again in every attempt to unravel these mysterious phe-In all ages of the world men have been innomena. clined to look upon the operations of dreaming as having more or less prophetic bearing upon the life of the individual. "Whatever is mysterious," says one, "as to its cause, and beyond the power of the will, as to our mental operations, often appears to us as belonging to the supernatural; and what is more mysterious and beyond our control than dreams?" There are millions of the human family who seek to obtain a true knowledge of their future prosperity and fortunes through the interpretation of dreams. Were this class of numerous seekers to devote as much earnestness in their attempts to comprehend the nature and character of these operations, as they have to divine their fortunes by them, the subject of dreaming would not now be involved in such a cloud of mystery.

When the brain and senses are awake, we are, by means of those organs of the body, brought into direct, percipient relation to a world of physical phenomena; but when the functions of this part of our nervous system are suspended by sleep, the physical world disappears from our view, and in its stead the mind fills up the apparently empty void, which is thus temporarily produced, with a class of phenomena of its own production. That the latter class of phenomena depends upon our mental operations, such as ideas and thought, has been already shown by the fact that the blind from birth and the deaf from birth can not see objects nor hear sounds in their dreams. For like reasons the unborn infant, not having perceived the objects of the external world, can not think-can not dream of the phenomena of the world. Were it otherwise, the unborn could dream of the works of art or of the cities of the world the same as the ordinary thinking man. can dream only of what we know. The unique appearance and utter confusion of things presented to us on

such occasions are owing to the erratic procedure and confusion of thought, which then depends entirely upon the association of ideas unassisted by the co-ordinating influence of the will in giving direction to our trains of thought. This temporary suspension of the will power is no doubt a wise provision of nature; for could we reason at those times, we would be constantly mistaking or confounding the occurrences of the dream-life with those of the waking-life, so that after a short interval of time had elapsed we should, under such circumstances, be unable to distinguish between the transactions of a dream and those of the waking state. For were both states alike rational and orderly, the two would so often coincide with each other that even the witness, when placed on the stand to testify to the truth of what he had seen and heard, would be constantly mistaking and confounding the objects and occurrences of one state for those of another, which would cause our whole life to merge into a state of uncertainty, and even utter confusion.

When awake we are, by means of the bodily senses, placed in direct, percipient relation to the phenomena of matter—to our own physical body and the external physical world. This proposition will doubtless not be called in question by any one. On the other hand, when the brain and senses are asleep, all material things—as the material body and the material world—recede for the time being from our view, from our immediate, percipient presence. The latter proposition will not,

we think, be seriously called in question by any one that reflects. For if you deprive us of the use of the bodily senses, it matters not in what way, you at once deprive us of all cognition of material things. What we fail to see, or hear, feel, taste, or smell, is for the time being the same to us as if all corporeal things had no existence whatever. The blind from birth, though immediately surrounded by a flood of light, with all its attendant colors, is no better off than if there were no such thing To him it is the same as if no such thing as light and colors existed; and so of the deaf from birth, they are destitute of all knowledge of sound. The same may as truly be said of all the other senses of the body. Deprive us of the use of all the bodily senses from birth, and we should have no conscious perception whatever of the presence of the material world. Suspend, therefore, the exercise and use of these avenues of sense, as in sleep and dreaming, and all things material disappear for the time from our immediate, percipient presence. In this condition of things space would appear to us entirely empty, did not the mind fill up the apparent void with phenomena of its own kind and making. That the mind produces the phenomena here referred to, is abundantly shown in the case just cited of the blind from birth, with whom neither light nor colors appear in their dreams. Where there is no thought in relation to such phenomena, there can be no like phenomena presented on the dream side of the mind, and so of the deaf from birth, where there is no idea of sound, no sound

appears to them in the dream state; and when there are no thoughts in the mind, there can be no dream phenomenon presented. As just remarked, the unborn infant can not think—can not dream. Without waking perceptions there can be no thought, because there has been no perception of objective phenomena in the mind to form the basis of thought.

That the dream objects differ from the physical objects, is evident from the fact that they are generally found to vary in form and complexity from one another; for did they always coincide exactly with each other, did the mental object coincide exactly with the physical, we should be led to regard them as identical; the two classes of phenomena would not be distinguishable from one We are alternately conscious of the percepanother. tion of both; we are likewise alternately conscious of their points of resemblance; and so we are conscious of perceiving their points of difference in regard to their peculiar form and complex nature. We are conscious of the perception of both classes of phenomena then—the one, which is universally, and so by common consent, denominated the physical; the other we shall call the psychical, because of its numerous points of difference from the former, and because it is derived from, and may be traced directly to, certain fundamental powers of the conscious soul. We call these powers fundamental, because dreaming depends upon the development of the mental operations, and is one of the common and peculiar modes of the mind's exercise. When

the mind is employing the nervous system, we are percipient only of the physical; when the nervous system is asleep, and the exercise of the mind is carried on independently of the brain and sense-organs, we perceive only the psychical. These two classes of mental exercise take place alternately throughout the whole period of life—as when we wake, and when we sleep.

When awake, we are percipient both of our material body and a material world surrounding us. When asleep. both poles of this physical relation—the body and the world—disappear from our percipient presence. So in dreaming we have like opposite poles of percipient relation to the objects then presented to our view that we have to those of the waking state. But with this difference: in dreaming we perceive nothing material—neither subjective nor objective-both the material body and the material world having for the time being disappeared from our cognitive presence; disappeared for the reason that they can be perceived only by means of the physical senses, which the soul is not then employing. When we are making use of the sense-organs, as in the waking state of the body, we are then conscious of perceiving our own personal, physical self, and at the same time conscious of perceiving material objects around us. So when the brain and body are asleep, we are equally conscious of perceiving our personal self as standing in like opposite relation to the class of objects which we then perceive. In both these instances we are forced to rely on the authority of self-consciousness for

all the facts presented in our perceptions—for our own personal form, and for the form of the objects that are presented to view. In both these cases we are compelled to rely upon the consciousness of our perceptions for everything that we observe. If we deny the authority of consciousness as a reliable criterion for what we observe in the one case—Self—we are compelled, by every known principle of logic, to reject its authority as a truthful witness in the other—the Not-Self. Subject and object are therefore alike perceived by us. In dreaming, our perceptions present us with a similar parallel to that which occurs in the waking state of the body. We have the same facts of consciousness involved in our mental acts in the former state that occur in the latter. We are conscious of the perception of the Ego, and at the same time of the Non-Ego; we are conscious, as when awake, of Self and of the Non-Self. For the truth of both these cases we are compelled to rely on our consciousness, for the reason there is no other criterion upon which to depend, either awake or asleep.

"He who applies," says Sir William Hamilton, "the argument of common sense, by appealing to the veracity of consciousness, should not himself, directly or indirectly, admit that consciousness is ever false; in other words, he is bound in applying this argument to apply it thoroughly, impartially, against himself no less than against others, and not according to the convenience of his polemic, to approbate and reprobate the testimony of our original beliefs. That our immediate conscious-

ness, if competent to prove anything, must be competent to prove all it avouches, is a principle which none have been found, at least openly, to deny." \* abundantly set forth in the writings of Sir William Hamilton, one of the most learned of the philosophers, that no philosopher has been so bold or so reckless as to reject the authority of consciousness in his psychological or metaphysical researches. For should he once set aside this authority in regard to any of its deliverances in any department of mental science, it would be impossible for him to establish any fact whatever in reference to the existence of the physical world or any act of the mind tending to establish the existence of the soul. On the principles of such refusal to admit its authority to establish any fact in regard to either mind or matter, everything would, in accordance with the data and tenor of such logic, become absolutely null and void.

With this authority of consciousness, then, fully and fairly impeached in regard to the fact of our mental operations, we should at once be plunged into complete and hopeless Nihilism in regard to everything, whether in the earth beneath or in the heavens above us. But on the other hand, with this authority unimpeached in regard to any and all its deliverances—and we can not accept these deliverances in part, and reject them in part—the percipient presence of the soul, as an object of our sight, is as fully accorded in the dream state as

<sup>\*</sup> Philosophy of Sir William Hamilton, p. 38.

are the phenomena that surround us at the time; and to deny the existence of such phenomena would be to deny the fact of the existence of dreams altogether, whether natural or inspired. Either both poles of this relation—the soul and its objects—are true, or both are false. If the objects are perceived by us, the soul is; and, per contra, if the soul is not perceived, the objects are not. Choose which horn of the dilemma you will accept. The one course leads to a complete and universal nihilism of all things, both in the realm of matter and of mind; the other, to a universal existence of all things that we cognize, both awake and asleep. The question of mental hallucinations, which has a close bearing upon this subject, has been heretofore considered.

When sleep locks up our bodily senses, we instantly, and without any knowledge on our part, glide from the immediate, percipient presence of the material body and the material world into the immediate, percipient presence of the personal soul and the psychical phenomena that objectively appear around it. Where the sleep is undisturbed by any morbid bodily influence, we perceive nothing but the spiritual part of our being, Self, and its surrounding psychical thought-phenomena. In this condition the personal spiritual soul is then brought into direct percipient view and relation to itself and its own spiritual phenomena; in like manner, as when awake, the corporeal body with all its physical surroundings is brought, by means of the use of our sense-organs,

into the direct cognition of the mind. In the one case, the mind uses the sense-organs of the body; in the other, it does not; in both it perceives phenomena. dreaming, then, our spiritual self and the spiritual notself are brought into direct, percipient relation to one another. "As the bodily eyes close in sleep, the eyes of the spirit open." Our spiritual senses do not deceive us as to the fact of the presence and perception of the dream objects; but our judgment is at fault in regard to their true nature. We never at the time suspect that we are in the immediate, percipient presence of any other class of objects than the material. Our waking knowledge is only of material objects, and as the dream objects do not differ noticeably from the material in regard to the distinctness of their sense-impressions upon the sentient soul, we do not hesitate at the time to accept them as such; hence the error is one of judgment, and not one of sense-perception. Owing to the suspension of the action of the will, we can not stop or call a halt in order to reason upon the nature and character of the objects presented to view; nor can we at such times stop to investigate the nature and powers of the soul, as to whether it is the soul itself that we see, or the physical part of our being. This question can be settled only by the exercise of the mind in our reasoning operations, which are brought into full exercise when awake. It is indeed a wise provision of our nature that the mind does not at these times engage in the laborious task of logical thought; for, were this the case, the body, becoming disturbed by deliberative mental exercise, would fail to receive the requisite sleep necessary to replenish our bodily energies for carrying on the physical and mental exercises of the succeeding day. Notwithstanding we are unable to reason in dreams, we still possess the power of perception, which brings us into direct, percipient relation with our own spiritual, personal form, and the objective, spiritual scenery of its immediate surroundings. For did we not perceive our own personality, both awake and asleep, we should not be able in either case to describe our own relative position to the objects that surround us.

In sleep and dreaming, the external senses are closed to the objects of the external world; and the soul, with its objective phenomena, glides insensibly into our conscious, percipient presence, completely disguised. disguise is made complete on account of our not being able to comprehend our new situation. We do not know at such times that the physical world has slipped away from our view, and is replaced by a world of our own production. When the brain and senses are awake, we perceive the one; when these are asleep, we perceive the other. When awake, we are, through the organs of the body, percipient of the physical; when asleep, we are percipient of the spiritual. Thus the soul is spiritual; the thoughts are spiritual; the phenomena that surround us are spiritual; the sensations we experience are spiritual; the perceptions are spiritual; the emotions we experience, and that so often disturb us at such times, are spiritual,—all that pertains to that realm is in its very nature spiritual! It is the body that sleeps and the soul that dreams. It is the soul alone that feels sensations arising in response to the thoughts and the objects of the dream. It is the soul that experiences the emotions that spring up on account of the different aspects of the objects, accordingly as they appear frightful or pleasing to us. Hence it is the sentient soul that feels, and sees, and hears, and appears to us in our dreams. At these times all our thoughts, sensations, and perceptions, with their attending phenomena, are constantly changing from moment to moment; but the soul itself remains the same permanent unity.

Could we reason at such times—could we stop at any time in the dream, and in an abstractive manner take a survey of all the surrounding phenomena, while in this our new departure we should find the objects that appear to us differing from material objects in the following particulars: First, we should, in the perfect sleep of the brain, find that the material body had receded completely from view: second, we should find the objects that then appear quite unstable and transient in their nature, appearing and disappearing with the everchanging thoughts; third, we should find that all our senses had been greatly intensified and in a state of hyperæsthesia, on account of the sense-powers of the soul acting disconnectedly from the nerves of the body; and being thus stripped of their covering, we should then find them perfectly adapted to the more subtile objects that then surround us; fourth, we should find the psycho-spiritual objects assuming a simple or more complex appearance than the physical objects present, accordingly as the thoughts of the mind were simple or complex in their nature. And lastly, we should find that the personal spiritual soul, and not the personal physical body, was acting in direct, percipient connection with the objects presented to view in our nocturnal visions.

In the waking state, the conscious or mental powers are placed by the bodily organs in percipient relation to physical phenomena; but when sleep disconnects the mental operations from the physical sense-adjuncts of the body, the conscious soul, temporarily losing its connection with physical phenomena, is then placed in percipient relation to that class of phenomena derived from the mind itself, which, as we have said, are of a psychical or spiritual nature. As these objects always correspond with the thoughts of the mind whenever our thoughts are of a disturbing character, the objects will be of a like disturbing nature, on account of which we are sometimes driven into the highest state of alarm. Do we at these times, then, see nothing, and are we terrified at nothing? An individual will sometimes become so alarmed at the sight of the objects of his dream, that he will commence struggling to free himself from the seeming danger that surrounds him; we say seeming danger, for he then believes himself surrounded by physical objects, and liable to all the dangers of the

physical state. And even when he awakes, and "monarch reason" has resumed the throne of the intellect. he will sometimes be in such a terrified condition as to seek refuge under the bedclothes, fearing that the same hideous monster should continue to rush upon him, forgetting at the moment the change in the condition of his senses, and the different nature of the objects that are before him, forgetting also that it requires only a single moment of time to change entirely the scenery from one state to that of the other. The error that the mind labors under in the dream is owing to the fact of the threatening nature of the objects, and of his mistaking the objects of one class for those of the other. In all cases the mind, having the power to represent nature so strikingly, imposes upon itself, by mistaking its own phenomena for the phenomena of the material world. Thus we are constantly mistaking the psychical phenomena for the physical, because we are at these times unable to distinguish any real difference in regard to their identity; the sensations that spring up in connection with the psychical objects are not distinguishably different from those of the waking state. Every man falls into a similar error to this when awake, for he is then disposed to reject the fact of the real existence of the dream phenomenon; the same as in dreaming we are, when awake, unwilling to admit the fact of the existence of any other state or phenomenal world than the one in which we are then engaged. The same remarks are applicable to the appearance of the soul as

an object of sight, for when we are awake it is difficult to believe that it ever appears present to us as a direct object of sight during the period of sleep and dreaming. In the waking state we do not believe that there is any other bodily form than the physical, the one that we then see and are employing. The alternation of the phenomena of the two worlds—the physical and the psychical—depends upon the alternate use of the senses we employ, whether inner or outer, psychical or physical.

That man possesses a dual nature—a spiritual soul and a physical body, both in the same personal form, and that it is the former that appears to us in our dreams—is evident from the fact that whatever mutilations the physical body may have undergone, such as the loss of one or more of our limbs by amputationwhether upper or lower-no such deficiency, no such mutilation, is found to exist in the form of the soul similar to that of the body. If we could see the physical body at these times, we should see it in all the defects or mutilations of the waking state. That it is the personal soul-not the physical body-that we see, we have the testimony of two of our senses; viz., the sense of sight and the sense of feeling. The last-named is always the same on the side that is deprived of the limb as on the opposite side. The form of the soul is complete, and the sensibility is complete throughout its entire personality. Nor do we represent our personal, psychical form at such times the same as we represent the personal form of our friends or acquaintances; for while we may faithfully represent the form of others in reference to stature, features, color of their eyes, the sound of their voice, etc.; we can not endow these forms with either sensibility or intellect. We can personate them in regard to form and character, but we can not create them. Those persons who have suffered the loss of a limb, when they dream of seeing an acquaintance who has sustained the loss of a member of the body, will be most likely to represent their friend with the limb absent, while in their own case, the sensibility being continuous throughout, they always appear complete in regard to sensibility and form in every part.

While dreaming we are not, at the time being, dependent upon the action of our nervous system for the phenomena that are presented to view. This will appear from the fact that those persons who are suffering from total blindness occurring at adult age-after the mind had become familiar with the phenomena of light and colors—will dream of seeing objects the same as when the nerve of sight was perfect. Thus, when an individual has been deprived of the sense of sight from amaurosis or paralysis of the optic nerve, his vision at such times is perfect, although the nerve is incapable of performing the office of vision when awake, showing that the powers of the soul, while dreaming, are not impaired by the accidents of the body. Laboring under this defect of the nerve of vision, when asleep, he sees; when awake, he is blind. The same may be

said of the totally deaf, having sustained an injury of the organ of hearing after the mind has been stored with the knowledge of sound: when asleep, he hears; when awake, he is deaf. These circumstances alone show that the mind is not dependent upon the use of the nerves of sense while dreaming, and also show that it is the soul that dreams, while the brain and nerves of the body sleep. The nerves of the body never respond to the action of the mind in dreaming except where some of the voluntary nerves have been sufficiently aroused from their somnolency to respond to the mental action; and when such sudden responses occur, they are generally only momentary, and very soon lapse into a state of sleep, while at the same time the dream phenomenon will commonly go on in its usual rapid manner. In dreaming, then, the spiritual soul is capable of performing the office of seeing, hearing, etc., without the aid of the corresponding organs of the body. This fact is further shown in cases where an individual is completely paralyzed in the muscular nerves of one side of the body, involving at the same time a total loss of the sensibility in the nerves of the same side. Such a person will experience no loss in regard to the sense of feeling on the corresponding side of the soul. Such individuals, when dreaming, are always conscious of possessing the sense of feeling on both sides alike, the same as if no loss of power and sensibility had taken place in the physical body. The same remarks are applicable in the dreams of those who

have sustained a loss of power arising from the paralyzed condition of one of the limbs that we found in cases of the amputation of a limb: there is no such deficiency observed in the soul as is found in the physical instrument with which it is at the time connected.

In cases of amputation of the limbs—upper or lower, one or all—there is no such absence or loss observed in the soul of the dreamer who may have suffered such mutilation of the body. It matters not how long he may have undergone privation on account of the absence of a limb, or what may have been his experience in regard to the use of crutches, as the material body recedes from view on account of the sleep of the brain and senses, the soul insensibly glides into his percipient presence unmutilated and perfect in regard to form and sensibility. Although the change from the outer to the inner state of things-from the waking to the dream life—takes place in a very short space of time; and although the individual may, in certain instances, carry along with him to the dreamside the remembrance of having had a limb amputated, nevertheless the form and perfect sensibility of the soul in all its parts outweigh the recollection of its having been otherwise; for he then has the evidence of two of his senses—sight and feeling—to the contrary; and we always rely on the immediate testimony of the senses, whether awake or dreaming. In these cases, the presence of the psychical limb and the accompanying sensations in the soul, which are then experienced,

become a living contradiction to the remembrance that the limb had been removed; and this impression continues until he awakes to find one of the limbs of his body absent. As in the moment before awaking he believed that he had but one body, and that it was unmutilated in form, so in the moment that follows he believes that he has but one body, and that it is in a mutilated condition. He forgets that he is composed of matter and spirit, and that these appear, not at the same time, but alternately. In both these conditions his mind is conscious of its perceptions. both states he relies on the testimony of his senseperceptions. Hence the disappointment that such persons often experience in passing from the dream state (in which they find all their limbs present and active) to the waking state, in which they find themselves deprived of the use of one or more of their physical members. In the one case, the individual is looking upon the spiritual side of his nature; in the other, he sees only the physical. In the one case, he never appears to require the use of crutches, in the other he is compelled to make use of them to aid in the performance of locomotion. We can not even dream of the absence of a limb in reference to the soul, nor of the absence of vision or hearing, for the reason that in such cases the sensations we experience at the time are at variance with and therefore contradict the thoughts pertaining to such absence. In dreaming everything is controlled by our thoughts and sensations.

But a question will here present itself: How can the soul assume the attitude of sitting, standing, walking, running, flying, etc., seeing that it must occupy the whole body in the performance of the vital functions of the different parts, and at the same time the body is asleep and occupying the recumbent position? The answer to this question is, The body alone sleeps; the soul dreams. The soul alone thinks, and the phenomena appear in direct conformity with its thoughts and sensations. When, therefore, we dream of sitting, the thoughts and their objects conform with this position. When we dream of standing, the thoughts and the objects coincide with the erect position; and so of the others. We do not quit the body, but the pheromena accord with the thoughts, and with the emotional feelings, while the soul experiences subjective sensations corresponding with the thoughts and the emotions which may be that of sitting, standing, running, flying, etc. We are at these times in a spiritual realm, in which everything is, from moment to moment, dependent upon the operations of the conscious powers of the soul. We are occupying a realm where the physical objects that surround us are not cognized, and where the psychical phenomena are not conforming in their spatial arrangements with the physical body. We may, at the time, be dreaming of making a voyage to Europe, in which the soul furnishes all the requisite conditions and details of the trip—such as the ocean, the ship, its crew—representing and personating a variety of passengers to accompany it; for at such times the mind seldom prefers a state of either silence or solitude to that of social intercourse.

When we dream of walking, the mental movements proceed somewhat slowly; but when we dream of running, the order of the panoramic display is quickened in direct proportion to the acceleration of our thoughts. At these times we always experience subjective sensations arising in the soul—not in the nerves of the body —in direct response to the thoughts and the objectified phenomena that surround us. Thus we are conscious of the thoughts; we are conscious of perceiving the phenomena, and of feeling sensations of moving like those of the waking experience. If we dream of flying, our thoughts, conforming with the desires of the mind, proiect the phenomena at a suitable perspective beneath us, and in regular train of panoramic movement, while at the same time subjective sensations arise within us, corresponding with the thoughts and the underlying objectified scenery of the vision. But the question may be asked, Why should we ever make an attempt to fly in the dream state, seeing that we never experience any such power as this in the waking state? In the waking state the action of the mind is in connection with the brain and sense-organs. It is then intra-organic, while in the dream state the action takes place independently of these organs and of the voluntary muscles; hence the psychical action is supra-organic. Do we, then, feel at these times a buoyancy and celerity

of motion above what is felt in the waking condition of the bodily organs? Whatever the mind attempts to accomplish in dreaming, if there is no diversion of the trains of thought from the prevailing purpose at the outset of the dream, it always carries the purpose into effect. The fleeting thoughts and fleeting train of underlying phenomena, with the accompanying subjective sensations, complete the phenomenal sensations, complete the phenomenal movements. The soul does not move amidst the phenomena, but the phenomena move beneath and around it with such regularity as to give the appearance of flying. We sometimes experience deceptive appearances when awake, as when we are in a boat pushing out from shore, not feeling the motion of the boat. We appear to be stationary, while the objects on shore appear to be moving from But when we dream of flying, this is reversed: we appear to be in motion, because we experience sensations of moving and our perceptions of the moving panorama beneath us give the appearance of flight. the soul seems to move majestically under the direction of its own powers. While the scenery of the vision moves, as it were, in panorama before us, the soul, in relation to the physical body and the world, is stationary.

If we dream of handling objects, we always find the objects ready formed in the hand in obedience to the accompanying thoughts and tactile sensation. This takes place without any knowledge on our part that the objects thus furnished to our hand were the prod-

ucts of the thoughts of the mind. When awake, all our sensations are felt in the soul, and not in the nerves of the body. When asleep, the phenomena of the dream are referred to, and correspond with, the inner senses. Everything in this new departure of the soul is accepted on the basis of its thought-phenomena and the accompanying sensations, which always tally with the thoughts and the objective phenomena. In this state our thoughts would, in general, proceed in regular, logical order were the faculty of the will in exercise the same as in the slower mental movements of the waking state of the brain and bodily organs. will acted at such times, we could accomplish, psychically, anything we chose to accomplish; for then all our thoughts would be controlled by the co-ordinating and, as it were, punctuating power of the will. this means the dream phenomenon, with which all men are familiar, is capable of introducing us into an inner spiritual life of the soul, in which thought, objective phenomena, and sensations all correspond exactly with one another. In this peculiar state of mental operations we should, indeed, be capable of reaching the highest order of intellectual attainment, provided the will was released from the restraint that the sleeping brain and nerves seem capable of exerting upon it.

Dreaming ushers us into a mental state in which everything—the soul, the thoughts, the sensations, the phenomena presented—are all purely spiritual. And whenever these operations appear to blend with the

physical, as they sometimes do, it is where certain nerves of the body are sufficiently wakeful to permit some of the mental movements to enter the channels of the nervous system, so as to manifest themselves on some particular part of the organism, giving rise to bodily sensations and somnambulic muscular movements of the limbs, as well as movements of the vocal organs, giving utterance to the dream-thoughts. sometimes takes place in frightful dreams, in which the affrighted soul, striving to extricate itself from seeming dangers, will continue to struggle for a considerable length of time before it finds relief by arousing the nerves of the different sense-organs to wakefulness. In this way the soul is enabled to extricate itself from the thralldom with which its thoughts and the attending sensations and phenomena appeared to be threatening it; for at such times we always believe that we are awake and acting in connection with the body and the physical world. But in some instances, where the sleep of the brain is quite profound, the conscious or mental powers will work up such a complication of frightful appearances in the vision that the affrighted soul will struggle for some time to free itself; and at last, by a sudden and violent effort, it will, through the agency of the nerve-current, sweep through some channel of the sleeping fibers of the brain and its dependent nerves. Upon awaking from this condition, we sometimes see the physical frame tremble, and even shake violently, under the influence of the mental ex-

citement, until great drops of perspiration will start from every pore of the body. We may in some instances sit by the side of the sleeper and witness the struggle as it goes on, until we see him leap from the couch to the floor of his sleeping-apartment. This sudden surprise of the nerves, and the excitement of the body that immediately follows, would not have taken place had the brain been awake at the commencement of the dream excitement, thus showing conclusively that it is the body that sleeps and the soul that dreams. In some instances this mental excitement will reach to such a pitch as to border closely upon a frenzied condition of the mind; and in certain cases of great nervous susceptibility, where the time is greatly prolonged without awaking the brain and nerves to action, the effect may end in the interruption of the heart's move. ments, thus entirely breaking up the connection of the soul with the body. This is brought about through the sudden suspension of the unconscious instinctive powers of the soul which preside over the vital forces of the body. Such a result is, however, generally prevented by the sudden and rapid effort of the soul to escape from its seeming danger, which commonly serves to awaken the brain and external senses, so as to restore the affrighted mind to a perception of the more orderly phenomena of the external world. When the barriers become removed by the awakening of the brain and senses, the frightful objects of the dream disappear, and we are soon quieted by the more peace-

ful and stable scenery of material nature. How often do we see persons, when slowly awaking from one class of scenery to the other—as from the scenery of the dream world to the more quiet scenery of the waking world-commence talking or laughing, weeping or wailing, whooping or hallooing, as they merge from the thralldom of their dream, to enter upon the more quiet world of external sense, in which the former things that occasioned their previous excitement had completely disappeared—disappeared wholly on account of the waking state of the brain and senses bringing another class of objective scenery into view! The moment preceding the return of the bodily organs to wakefulness, the dreamer does not believe that there is any other world than the one then engaging his attention. A similar conclusion follows the moment after waking: he is then disposed to believe that there is no other world known to him but the physical, which is then engrossing his whole attention. Both worlds impress us alike with all the distinctness of a reality. The one world acts upon the senses of the soul through the intervening organs of the body; the other acts directly upon the senses of the soul, without the aid of these organs. The phenomena impressing our senses in the one case are material, in the other, spiritual, or, rather, psycho-spiritual—psycho-spiritual because the soul alone is concerned in their production. In the former case, the objects of sense are stable and more or less permanently fixed, enduring with the passing centuries; the other, unstable and unfixed, enduring only with the passing thoughts and moments as they fly. The one world relates mostly to the present, the other relates mostly to the future state of the soul. One class of the psychical powers relates directly to time; the rational exercise of the other, to eternity. Eternity is a never-ending rational vision of the soul. The dream world is, at the time being, a real existence to us—real as it regards thoughts; real in the sensations we then experience; real in the perceptions of the phenomena before us; real in the emotional feelings we experience; real in regard to the then present convictions of the We lack only the co-ordinating influence of mind. the will to make this state rational and one of a much higher order than that which directly pertains to the physical order of things.

## CHAPTER III.

## THE SOUL AN IMMATERIAL ENTITY NOT DEPENDENT UPON THE BRAIN IN DREAMING.

N the theory which we have advanced, that the J soul occupies the whole body, and is present in all the parts, differentiating the vital functions of the several parts, it will be urged by many that it must, in order to perform these powers in relation to the body, possess the property of extension, and is, therefore, material. In reply to this it may be said that space is universally, or, as it is sometimes said, infinitely extended; but pure space can not, for this reason, simply be regarded as material. "Shall we," says Dr. Good, "take the quality of extension as the line of separation between what is material and what is immaterial? This, indeed, is the general and favorite distinction brought forward in the present day; but it is a distinction founded on mere conjecture, and which will by no means stand the test of inquiry. Is space extended? Every one admits it to be so. But is space material? Is it body of any kind? Descartes, indeed, contended that it is body, and a material body; for he denied a vacuum, and asserted space to be a part of matter itself; but it is probable that there is not a single

espouser of this opinion in the present day. If, then, extension belongs equally to matter and to space, it can not be contemplated as the peculiar and exclusive property of the former; and if we allow it to immaterial space, there is no reason why we should not allow it to immaterial spirit. If extension appertains not to the mind or thinking principle, the latter can have no place of existence, it can exist nowhere; for where, or place, is an idea that can not be separated from the idea of extension; and hence the metaphysical immaterialists of modern times freely admit that the mind has no place of existence, that it does exist nowhere, while at the same time they are compelled to allow that the immaterial Creator or universal spirit exists everywhere, substantially as well as virtually." \*

We have shown elsewhere that the soul is the true artificer of the body. It constructs all the parts, and maintains the vital functions of the different parts. In this respect it stands in its relation to the body as a personal, causal entity, differing greatly in its powers from the material; for while it possesses the property of extension, it is destitute of that universal property of matter called attraction of gravitation. The human body weighs no less immediately after death than during life, when the personal occupant was present, vitalizing all its parts. In the vitalizing process it gives form to the body, but not weight. Like the im-

<sup>\*</sup>Good's "Book of Nature," Series 111, Lect. 1, on "Materialism and Immaterialism."

ponderable agents—heat, light, electricity, and magnetism—it possesses the property of imponderability, and is, therefore, intangible. Differing from matter in every respect, except in regard to the property of extension, its powers are instinctive, sentient, percipient, intellectual, emotional, self-conscious. Being endowed throughout with a self-active spontaneity in reference to all its powers, and being imponderable and without weight, as well as destitute of the common law of impenetrability in relation to things material, it dwells in the body as a personal, causal force, without displacing any of the materials of which the latter is composed. Neither does the latter possess the power of displacing the former. As it appears to us in dreams, it is found to exist in the personal form of the body, whether the latter is entire or mutilated by dismemberment of some of its parts, differing in every other respect from matter, except that of the property of ex-When the surgeon applies his knife in the dismemberment of the parts, the physical parts are divided on account of the mutual relation or law of impenetrability existing between the knife and the parts to be divided. But this law of interrelation does not exist between the ponderable materials composing the knife and the imponderable soul; hence there can be no division of the personal form of the psychical occupant of the body. It was shown, when speaking of the action of the soul in the construction of the physical organism, that there is no direct relation nor

connection existing between the psychical and material substance, except in the case of the matter entering into the composition of the body; and here there can be no connection between the soul and the body except where there is an intervening polarized vital link connecting the atoms of the living cells with the former. Hence there can be no connection whatever between the soul and the body when the latter is dead, nor between the soul and the dead matter, of which the surgeon's knife is composed. It has been shown that the psychical occupant is connected with each and every cell of the body. For this purpose the nutrient materials of which the cell is composed and replenished must be first vitalized before it can enter the cell or be appropriated by the psychical artificer in the construction of the tissues that compose the organism. fulfill this purpose, the very blood circulating through the body is alive; and hence it is from this constant vital stream of living nutrient material that the capillary system of blood-vessels is supplied in the construction of the organism. When, therefore, the surgeon applies his knife in the separation of a limb, the psycho-vital forces of the cells of the tissues composing the dismembered limb are broken up, so that the intimate relation and connection of the one to the other is completely destroyed.

According to the generally-accepted teachings of the schools, it is maintained that all space is occupied by an imponderable ether, which permeates all matter,

occupying its intermolecular spaces. They tell us that it is infinitely or universally extended, that it exists everywhere, and hence can not be displaced by material substance, nor mutilated nor dispelled from any part of space. Further we are told that it exists as truly in a vacuum as it does in any other part of space. universally-extended ether can not, therefore, possess the law of impenetrability in relation to matter. can not displace matter, nor can material substance displace it. Both occupy the same place at the same moment of time. The only effect matter exerts upon the ethereal substance is to diminish the frequency of its pulsations or wave-movements as these are transmitted through the intervening molecules of material sub-The same remarks are, in this respect, applicable to the imponderable personal soul. It occupies the whole body without displacing any part of the materials of which it is composed. The law of impenetrability does not prevail between the soul and the body as between the soul and the brain. Like the imponderable ether, which, at the same moment of time, occupies the same space as that occupied by material substance, so it may be said of the imponderable, extended soul, which is in the form of the body, is not subject to like mutilations as those to which the body is liable. "Divisibility," says Sir William Hamilton, "is a primary law of matter;" but it can not be thus asserted or claimed of immaterial spirit.

That the soul is not limited to a single part or point

in the body, as has been sometimes asserted by philosophers both ancient and modern, is evident from the fact that it performs different powers and different offices in the various parts of the body, such as seeing in the eye, hearing in the ear, tasting in the tongue, smelling in the nasal cavities, feeling in the fingers'ends, as well as general sensibility throughout the entire surface of the body. But we are not left wholly to speculation in reference to the form of the soul; for in dreaming, as heretofore shown, we have the testimony of self-consciousness in relation to its personality and form. In this state we are furnished with abundant opportunity for studying many of the psychical powers that are wholly unknown to us in the waking state of the body. During the sleep of the brain and senses, a class of phenomena are then presented to our observation that would be entirely unknown to us were it not for the sleep of these organs. Our self-consciousness settles the fact that, while dreaming, the soul appears to us in its complete entirety, even though the body with which it is at the time connected is variously mutilated on account of the previous loss of its limbs. On the same principle that the fracture of the rock does not destroy the continuity of the all-pervading, imponderable ether that permeates it, so the mutilation of the parts of the body does not destroy the continuity of the imponderable soul that occupies it. The soul is everywhere present in the body. As a personal, causal energy, it builds the body,

differentiating it into numerous parts, and carries on all the different functions of the parts. In the language of Emerson, the soul is wholly embodied, and the body is wholly ensouled.

But an objection may here be urged, that in our dreams we do not see the soul in a state of nudity, and therefore the position we have taken, that the soul appears to us as an object of sight, falls to the ground; but the same objection would apply with equal force against the perception of the physical body in our states of wakefulness. In dreams, the soul appears to be clad in that particular style of costume with which we are most familiar in the waking state. Thus the common custom and habits of life may be seen cropping out with a remarkable degree of certainty on the dream side of the mind. So great, indeed, is the influence of long-established custom upon us that on these occasions we become, in a great measure, largely subject to its control. This will appear from the fact that when we dream of being in a state of nudity we are quite sure to shrink from the presence of the society which we personate around us and with which we seem at the time to be mingling, to seek some place of retirement, where we may find relief from that confusion and mortification of mind that attend us at such times. Thus the soul not only thinks, but experiences, the attending emotions of its nature. It not only furnishes all the surrounding scenery of the vision, but likewise, by a feeling of long and inveterate custom,

it is sure to attire itself in that familiar style of dress which custom and long training of modesty has impressed upon each individual. True to this law, the different sexes will, on account of long-accustomed habits of life and training, appear attired in such costume as is appropriate to each. And for like reasons those nations that are accustomed to the condition of partial nudity will appear in accordance with their own particular habits of life and thought. Taking this view, there is no doubt but the Bushmen and the Feejeeans will, in their dreams, appear to be clad in very different costume from that which pertains to civilized life. Thus the common conventionalisms of life are generally found to appear on the dream side of the mind. Everything that appears to our view in dreaming, except the soul itself, is the direct product of thought. The hands furnish raiment and protection to the body; the thoughts furnish the raiment to the soul. we read in the Apocalyptic vision of a vast multitude of every nation, kindred, tongue, and people, clothed in white raiment—fit emblem of highest purity of thought. But of this again, when we come to consider dreams and visions as related in the pages of sacred authority.

The prevalence of this law may be accepted as a constant attendant, not only through the different nationalities to the most civilized races of men, but down through the lower tribes of animated nature. Did not the forms and mental peculiarities of the lower

races of animals attend them in their dreams, the dog would, no doubt, appear merged into the same form, color, and character as that pertaining to the animal or object of his chase; and for like reasons the feathered tribes would appear in the same form, covering, and color as the quadruped, and vice versa. But on the contrary, in dreaming, each and every animal retains its own individuality, form, color, and other characteristics as those which pertain to its waking state. There can be but little doubt that, during sleep, serpents dream of crawling; birds, of flying; and quadrupeds, of walking and running, the same as they are accustomed to do in the waking state of their brain and bodily organs.

Wherever the powers of perception exist, there mind exists.

"What sees is mind, what hears is mind; Nothing sees or hears but mind."

All animated nature is, to a certain degree, percipient; for almost all animals see and hear. Wherever, therefore, the power of perception exists, and the power of reproducing those perceptions independently of the exercise of the brain and external organs of sense, as in sleep and dreaming, there mind exists. Viewed in this light, then, dreaming is not solely limited to the higher orders of animated nature, but extends all the way down the animal scale wherever sense-perception or limited thought presents itself to human observation.

Dr. McNish, in his "Philosophy of Sleep," says: "Man is not the only animal subject to dreaming. We have every reason to believe that many of the lower animals do the same. Horses neigh and rear, and dogs growl in their sleep. Probably at such times the remembrance of the chase or the combat was passing through the minds of these creatures, and they also not unfrequently manifest signs of fear, joy, playfulness, and almost every other passion. Ruminating animals, such as the sheep and cow, dream less; but even they are sometimes so affected, especially at the period of raising their young. The parrot is said to dream; and I should suppose some other birds do the same. Indeed, the more intellectual the animal is, the more likely it is to be subject to dreaming. Whether fishes dream it is impossible to conjecture; nor can it be guessed with anything like certainty at what point in the scale of animal intellect the capacity of dreaming ceases, although it is very certain there is such a point. I apprehend that dreaming is a much more general law than is commonly supposed, and that many animals dream that are never suspected of doing so."

"There can be no doubt," says Dr. Good,\* "that other animals have their dreams as well as man, and that they have them as vigorous and as lively. Every one has beheld his favorite dog, while asleep by the fireside in the winter season, violently stretching out

<sup>\*</sup>Good's "Book of Nature," Lect. on "Sleep and Dreaming."

his limbs, howling aloud, and at times starting abruptly, beneath the train of images of which his dream is composed." In cases of this kind we have exhibited somnambulic movements of the muscles of the limbs, tongue, and glottis. The muscular nerves—not the nerves of sense—were, no doubt, in the case above mentioned, so far kept in a state of wakefulness through the influence of the warmth of the fire as to be able to respond to the dream operation, and thus, to some extent, reveal the character of the ideal images passing through the mind of the animal.

From the foregoing remarks and citations we are led to conclude that dreaming is a universal law of mind, extending throughout the entire animal kingdom, from the lowest orders up to man, and from man on upwards into the highest state of enraptured vision. But the relation which nocturnal visions bear to inspired visions, such as we find related by writers of Sacred authority, will be considered further on. Nature has her spiritual side exhibited to us in the mind, as well as a material side connected with the body. The phenomena of material nature find a suitable lodgment in the human mind in which, by an irresistible law of our nature, the perceptions of external phenomena are, by means of the laws of thought, transformed into resembling phenomena of spirit; so that, if the thoughts were properly co-ordinated into rational procedure, man would be furnished with everything requisite for reproducing a phenomenal world of the soul in a future state of existence, after the brain and physical senses are destroyed. But of this again.

There is, however, a class of physiologists and pathologists who are unwilling to admit that the mind possesses the power of action independently of the brain during the states of sleep and dreaming that deserve a passing notice here. They assert that when ideas arise in the mind of the dreamer, the ideas descend from the periphery of the brain, and thence follow the nerve-fibers till they reach the nerve-centers of this organ (which centers are supposed to be, at such times, in a state of more or less constant wakefulness), and there, in those nerve-centers, give rise to dream-This is substantially the thought advocated by Dr. Maudsley in his "Pathology of Mind" (chapter on Sleep and Dreaming). Now, these so-called nervecenters are nothing more nor less than small ganglia or knots existing in the nerve-cord, and serve to mark the commencement of the different nerves as they emerge from the brain, to be distributed to the organs of sense. It has been heretofore shown that all that part of our nervous system connected with the mental operations must, during sleep, discontinue its action with the mind in order to afford an opportunity for this part of the nervous system to obtain its necessary repose. The brain and senses can not sleep while the mind is employing them as an instrumentality, for the reason that such relation and exercise would constitute the waking condition. Hence the nerve-centers, being

connected with the mental operations during the state of wakefulness, require sleep the same as the brain and nerves proceeding from it. We claim that one part or section of a nerve-trunk can not be awake and performing its requisite function while the fibers above and below that point are asleep. Did not the nervecenters sleep along with the brain and nerves of which they form a part, we should in a very short time have a state of enervation and morbid conditions resulting in unmistakable disease of the brain and mind; but to obviate this result Nature has provided for the periodic sleep of the whole of that part of the nervous system connected with the mental operations. wakefulness of this part of the nervous system at such times has not been proven, but is simply supposed to exist, in order to account for the operation of dreaming upon a physical basis, holding that this phenomenon can not take place without some sort of nerveaction. It is well known that the brain and nerves of special sense are asleep at these times; hence it is claimed that the ganglionic centers are the parts of the nerve-substance that remain awake during sleep and dreaming. But this is a mere gratuitous assumption, gotten up by Dr. Maudsley and other materialistic physiologists for no other purpose than to connect this strange class of our mental operations with some part of the nervous system. Hence, to suit the convenience of these theorists, it is claimed by them that a small portion (say about one inch in length) of the nervecord remains in a state of complete wakefulness to fulfill this purpose; and yet this part of the nervous system is well known to be as much concerned in the mental operations during the whole of the waking state as the brain and the special nerves of sense, of which these are but a fractional part, and hence must possess the same requirements for sleep as the brain or any of its dependencies.

Unless these centers are permitted, by a suspension of their functions, to sleep along with the brain and its other nerve-dependencies, we should soon have a state of morbid wakefulness resulting in uncontrollable delirium, and even violent mania. But as these nervefibers all have their commencement in the brain, and proceed without interruption throughout the whole length of the nerve-cord to their final termination in the organ of the body to which the nerve stands related in function, it is a gratuitous assumption to assert that during sleep the small part above referred to remains awake so as to connect the operations of the mind in dreaming with the nervous system, while the same nerve-fibers above and below this point continue in a state of profound sleep. The case may be stated thus: In order to account for the formation of dream-images, it is held by Dr. Maudsley and others entertaining like views, that "while the brain is asleep, an idea which arises in the mind in a dream (of course, without the aid or assistance of the sleeping brain), being unable to follow the accustomed paths of reflection, acts down-

wards upon the sensory ganglion, and takes shape as a distinct image or actual perception, so that a dreamtrain of ideas is a train of images." \* Thus the images are displayed to our observation in the form of dream images at the ganglionic centers, where they are supposed to appear to us as external objects of sense, somewhat after the nature of those images which, proceeding in an opposite direction from the objects of the world, impress themselves on the mind through the external organ of sense. To illustrate this point still further, let us take one of the nerves of special sense—the optic nerve, for instance, which is commonly the first to fall asleep in connection with the brain. Now, every physiologist knows that both the brain and the optic nerves fall asleep, and that the natural function of the parts which pertain to their waking condition is thus suspended; and yet the mind is capable of performing acts of thinking, seeing, hearing, feeling, etc., the same as before, but without the aid of either physical objects or the corresponding organs of the nervous system. It is alleged by the materialistic theorists that an idea forming in the mind descends downwards upon the sleeping fibers of the brain the same as when this organ is awake, and, finding a waking spot in the ganglionic centers of the optic nerves (corpora quadrigemina), the idea is then and there displayed to our view as dream images which

<sup>\*</sup>See Dr. Maudsley's "Pathology of Mind," chap. on "Sleep and Dreaming," p. 13.

resemble in appearance the objects of external nature. But what is most fatal to this theory is, the totally blind from amaurosis or paralysis of the optic nerves, sees the dream objects in his sleep the same as when these nerves were in their normal condition and function, thus showing that the optic nerves are not contributing anything to the operation of dreaming any more than they can contribute to the function of vision in the waking state. When the individual laboring under amaurosis is awake, he is totally blind; when the brain is asleep, he sees. But he can not see the mental images except when his brain and optic nerves are asleep. In order to explain the phenomena of dreaming by the action of the optic centers in the above instance, these theorists would be compelled to assume the position that, in amaurosis, while the whole nerve-cord is in a paralyzed condition, the optic centers alone must be in a state of complete functional activity, which position would be wholly untenable. The same may be said, mutatis mutandis, in regard to the auditory nerves, when these nerves have been paralyzed, at adult age; the individual dreams of hearing sound the same as before the paralysis occurred. Hence, according to Dr. Maudslev, these nerve-centers must retain their constant activity after the nerves have been paralyzed, the same as before this occurrence took place; so that, on this hypothesis, neither sleep nor paralysis can in the least affect the normal activity of the brain-centers. regard to hemiplegia, we dream of walking and run-

ning the same as before these nerves had lost their functional power. But, according to Dr. Maudsley, an idea of walking and running had descended upon these paralyzed centers; hence the dream. Sentient, indeed, would have to be these paralyzed nerve-centers to feel the ideas descending upon them in their fairy tread. The paralyzed nerve may interfere with the exercise of the soul in the waking state, but it can not so interfere or abridge its action in the other—the dream state. What we see and hear when we dream is wholly different from what we see and hear when the external senseorgans are awake and receiving impressions from objects without. The former phenomena are spiritual in their nature, because they have no other origin than the mind that produces them; while the latter class of phenomena belong to the material, and hence are not, as a class, dependent upon the mind for their existence.

As every dream has more or less relation to several of the senses—to sum up the views of the above theorists, if the ideas formed in the mind of the dreamer should relate to bodily movements—say that of walking or running—it is claimed by those theorists that the ideas descending upon the muscular center of the brain (corpora striata) result in dreaming of walking or running, as the case may be, agreeing, in this respect, with the idea formed in the mind of the individual; and so it is claimed where the attention is directed to eating or drinking the ideas thus formed, descending upon the nerve-centers of taste, we dream of these indul-

gences; and so in regard to the sense of smell, it is claimed that we dream of perceiving odors. For like reasons it is held that if the mind should entertain ideas relating to the sense of touch, we forthwith dream of handling objects on account of these ideas descending to the nerve-center that relates to tactile sensibility. In this manner some physiologists and philosophers would undertake to explain all the phenomena of dreaming by the mind acting upon the brain centers.

The above theory is an entirely gratuitous assumption gotten up for the purpose of trying to connect the dream operations with some part of the nervous system, as in the waking state of the brain and its nerve centers.

Now, as Dr. Maudsley—one of the champions of this theory, and a stanch materialist—has, in order to be consistent with his own views, attempted to connect (as we think without good reason) the operation of dreaming with the nerve centers, we shall, for the present, leave him anxiously clinging to his little ledge of brain, and pass on to the consideration of another branch of this subject closely connected with the phenomena of dreaming; viz., somnambulism.

There is a mixed state of sleep and wakefulness arising from a morbid disturbance of some parts of the brain and nervous system, known as somnambulism, or sleep-walking, in which the individual acts out his dream. The somnambulist dreams and acts out his dream, because at such times that *track of nerves* which runs to the muscles remains awake—not simply at the

ganglionic center, but throughout the entire course of the nerves of volition—from brain to muscle, resulting in bodily movements. While in ordinary dreaming the same nerve track, together with all that part of the nervous system connected with the operations of the mind. is asleep. In this state we may have all the mental operations going on, except the action of the will, without any bodily movements. But in somnambulism certain parts of the brain are asleep, while some other parts of this organ, with its dependent nerves, are—on account of some morbid irritation of the part-in a state of wakefulness. Dreaming generally takes place in the normal condition of the nervous system during sleep, while somnambulism is always, or to a certain extent at least, abnormal in regard to the parts of the nervous system that remain awake.

In somnambulism the condition of the mind is different from the ordinary state of sleep and dreaming; for in somnambulism the will is acting and, to a certain extent, co-ordinating the thoughts of the mind; hence the mental operations are slower than in ordinary dreaming. The nerves of volition being awake at such times, the will not only co-ordinates the thoughts, but sets the voluntary muscles into active operation. To illustrate this point more fully, where some parts of the brain are asleep, while certain other parts of the nerve fibers extending from the center of the brain to the muscles remain awake, we have what is known as sleep-walking. In this state of things we have a mixed con-

dition of sleeping and waking. Some parts of the nervous system are awake, while other parts are asleep. Now, if the optic nerves are asleep, the individual sees no objects except those of his dream; but if, on the contrary, the fibers of the optic nerves should be awake, his movements will then be guided by the impressions of external objects acting upon the nerve of the eye. In condition the sleep-walker will, on returning through the rooms of the building in which he has been rambling, remove chairs or other obstacles that may have been purposely placed in his way by those watching his movements. But where the optic nerve is asleep, he will, instead of removing obstacles thus placed in his way, run against them; for he then sees no objects except those formed by the mind in his dream. If the auditory nerves should be asleep, the somnambulist will not in that case hear or heed conversation going on among the bystanders; he hears and heeds only such conversation as he witnesses in his To gain his attention in this condition, it will often require loud calls spoken directly in the ear, and when thus disturbed he will sometimes become more or less agitated on account of the words spoken having no conformity with the transaction nor with the mental operations then taking place in his dream; for then the occurrences of the dream seem to engross his entire attention. Where the sense of touch and bodily feeling are in a state of profound sleep, and the attention riveted upon the objects of his dream, it will then gener-

ally become necessary to take hold of the individual and shake the body, in order to arouse him to complete wakefulness. In fact, the somnambulist is dreaming, and at the same time, through the operations of his will upon the muscular nerves, is acting out his dream, modified in this respect by the particular nerve that remains in a state of sleep or wakefulness. nambulist may then have some of his external senses awake and acting in connection with the objects of the external world, while others are asleep, thus permitting the inner senses to act with the mind in direct connection with the objects presented in his dream-thoughts. This state of things is very different from that in which the whole brain and its nerves are asleep; for then the whole body sleeps, while only the conscious powers of the soul dream. In those instances in which the nerves distributed to the vocal organs are in a state of wakefulness, and the dreamer is engaged in conversation with the ideal personages of his own creation, the mental operations will frequently manifest themselves through those nerves, by giving action and distinct utterance to the vocal organs, thus giving us a clew, it may be, to his train of ideas. The action of the organs here referred to are generally momentary and fitful, giving rise to a few utterances, after which these nerves may immediately lapse into sleep, while in the dream the conversation may continue to be carried on without any further manifestation to the bystanders, showing conclusively that the nerve action is not essential to the dream action; but, as it were, unintentional and accidental—accidental because these nerves were sufficiently awake to catch and momentarily catenate with the dream action.

Somnambulism has contributed, perhaps, more than anything else to the notion that dreaming is somehow connected with the nervous system; but it must not be forgotten that while sleep and dreaming are perfectly natural and normal, that of somnambulism is always abnormal, and hence unnatural. There could be no action of the body in somnambulism if some one or more of the nerves of the body did not remain in a state of wakefulness from the center of the brain to the organ of the body to which the nerve stood related in function. While some of the nerves of the body drop into a state of sleep, others, on account of some morbid irritation, are kept awake, so that the mental action of the dream, finding a suitable channel of wakefulness, may begin to manifest itself on some part of the body. The part of the nervous system most subject to this wakefulness is that of the nerves running to the muscles, and this wakefulness is very apt to take place immediately upon going to sleep, before the muscular nerves drop into a state of sleep; for the somnambulist is most apt to arise and commence walking soon after the first encroachment of sleep. But in ordinary dreaming the whole brain and its dependent nerves are asleep. Hence the dream action of the mind can not manifest itself openly to the bystanders, on account of the sleep

of the nervous system not leaving any channel open for mental manifestation. In normal sleep the whole of the nervous system is completely locked up in sleep, so that the mental action, having no connection with the brain, far outstrips in rapidity of its movement anything of the kind in the waking state of this organ. But in somnambulism, some part of the brain being awake, the mental action is partially restrained by the influence of the brain upon the mind, so that the will regulates in part the mental movement; hence the mental action of somnambulism is much slower than it is in the ordinary dream state, in which the mind is not acting in connection with the brain.

If the soul is naturally immortal, it must be on account of certain capabilities or powers of acting independently of the brain and its nerves, for without such capability it could not act when the brain is destroyed. If the soul is immortal, it can act without the brain; and per contra, if it can not act without this organ, it is not immortal for the lack of such capability. But if it can thus act, it evidently possesses the power of thinking and acting when the brain and its nerves are destroyed.

The soul is that active, personal, causal principle in man which, as we have elsewhere shown, is formed at the fecundation of the ovum, builds the body, keeps it in repair, occupies it as a tenement, uses it as an instrumentality in the execution of the various acts of intelligence, and dreaming shows its entire capability of acting independently of the brain and sense-organs of the body, when these organs are asleep. If the soul is capable of seeing and hearing when the optic and auditory nerves are asleep—if it sees without the physical eye, and hears without the physical organ of hearing—it can think without the brain, and consequently can see, hear, feel, think, and act when the brain and its nerves are destroyed. Furnished and fully equipped by such an independent class of powers as here described, the soul is evidently destined to undergo a higher, rational, and more complete unfoldment in an endless course of ecstatic vision. But of this again, when we come to consider the subject of inspired dreams or visions.

There is perhaps no subject with which we are so intimately connected that has been, at the same time, so completely neglected as that class of mental operations known as dreaming. And yet this subject has been by the Author of our being urgently pressed upon every man's attention times almost without number, while at the same time there is no subject that has been so often and so persistently pushed aside as if entirely unworthy of our attention and study as these mental operations. Time and time again we have been suddenly startled to the highest degree of emotional excitement, as if to direct our attention to the study of these powers; but all seemingly without effect. Where is the individual who has not been pressed in his dreams, even to the seeming peril of his life; who has not been pur-

sued, as it were, by robbers and by vicious animals; or, it may be, precipitated down some ledge of rocks into caverns of darkness, or into the rolling billows of some fathomless sea? How often have we been excited to the highest degree; and awakened times almost without number from our seeming perilous condition, to find the whole physical frame trembling on account of the influence of this peculiar form of mental excitement until great drops of perspiration have started from every pore of the body. But all this has been of little or no effect as it regards the directing of the attention of the mind to a proper investigation of this strange phenomenon. Perhaps the only effect upon us would be, after becoming somewhat quieted down from our mental excitement, to bring about a change in the position of the body before dismissing the whole subject as being one entirely unworthy of our attention. Notwithstanding all this, such are the nature and powers of the mind that, whether we will it or not, whether we heed it or not, we still continue to dream, because it is one of the legitimate and unavoidable exercises of the mind; for dream we must! We expect to show in another place that the laws of dreaming would be as regular and as definite in their operations as are those of the waking state, provided the will were acting at those times. We also expect to show how it is that the phenomena of a dream are made to produce their impressions upon the senses of the soul in regular response to the thoughts of the mind. But this branch of the subject can be

better understood by studying it in connection with the sense perceptions of the waking condition of the bodily organs. It must not be forgotten that it is the soul alone that is sentient, and perceives the phenomena of the external world; and that these must, in order to be perceived by us, act directly upon the sentient occupant of the body through the different sense-adjuncts.

But a question will here present itself. If the laws of dreaming proceed uniformly from cause to effect, the same as in the waking state, why do not all dreams appear to be of equal distinctness at one time, the same as at another? The cause of this difference depends mainly upon the fact that the objects presented in sleep do not always impress us with equal distinctness. example: If we should dream of seeing a huge serpent lying coiled up in our pathway with its head elevated, apparently ready to spring upon us—the thought, accompanied with the appearance of such a monster, instantly produces in us an emotion of great fear, thus holding the attention of the mind until the vision is so completely impressed upon the memory that it is seldom forgotten upon our return to wakefulness. But where the thoughts and their corresponding objects are unattended by any disturbance of the emotional feelings, the result is otherwise. In the absence of emotional excitement and volitions, the thoughts very often proceed with such rapidity as not to engage distinctly the attention of the mind-neither by thought, emotion, nor objective scenery—and thus, failing to leave any

distinct impression upon the memory, no part of the dream can be related upon our returning to a state of wakefulness. Professor Wheatstone,\* in his observations upon the rapidity of light, has shown by actual calculation that the time required for a mental perception to arise in the mind may not exceed the onemillionth part of a second. He has shown that when a locomotive and train of cars are dashing by us in the dark at a speed of forty or fifty miles an hour, if brought to view by a sudden flash of lightning, the drive-wheels will appear under this rapid rate of motion to be perfectly stationary. So instantaneous, indeed, is the flash of light and the mental perception accompanying it, that the arms of the driving-wheel will not have time to make any appreciable change, even though the wheel is performing several revolutions in a second. It is not surprising, then, that under such a rapid procedure of our thoughts and their attendant perceptions of objects, as must sometimes take place in emotionless dreaming, a large part of our dreams fail to make any distinct impression upon us, or be remembered on returning to the waking state. It is quite different, however, where the thoughts proceed more slowly-and their corresponding objective scenery is riveted upon our attention—as they do at certain times, and as they always would do, provided they were properly restrained by the controlling influence of the will. In dreams we

<sup>\*</sup>See Professor Dolbear's work on the Telephone, p. 58.

are governed by the thoughts and the simultaneous perceptions of accompanying objects; these mental operations are often too rapid for voluntary action to take place, so that any attempt on our part to carry on a voluntary exercise of the mind would generally fail to be carried into effect. And as every thought, of whatever nature, is instantly attended with corresponding objects of like nature, and as these again are attended with instantaneous perceptions of the objects presented, the attention of the mind becomes diverted from the original purpose, so that we are constantly drifting along with the ever-passing objective scenery. Notwithstanding these facts, we sometimes experience transient glimpses of reasoning in our dreams. Generally speaking, however, the thoughts and the accompanying perceptions proceed with greater rapidity than the memory can retain them; hence we often fail to remember our dreams.

In dreaming, we always believe that we are awake and using the body. Could we be made to believe at such times that what we see occurring in our presence was not of a material nature, but that everything depended upon us for their existence, we should, in that case, be induced to stop at every turn that the scenery of the vision might take, and investigate the character of the objects presented. But as we never, or very rarely, suspect that we are dreaming, we always believe that what we witness belongs to the order of material nature; we have therefore no desire or inclination to

stop and call in question the fact of the existence of the phenomena presented, but always accept everything on the testimony of our senses, the same as when we are awake and looking at the scenery of the external world. It matters not at these times how grotesque or absurd things may appear, we always unqualifiedly accept everything as real that presents itself to our notice.

When awake the great majority of mankind unhesitatingly believe that there is no other world capable of affecting their senses besides the physical; and so in dreaming all men believe as firmly that there is no other world besides the one then engaging their attention. This is owing to the fact that the impressions made upon the senses in both states affect us in a similar manner. Could the functions of all our physical senses be completely suspended by sleep for a period of one thousand years, we should not be able to determine during that time whether the physical world was separated from us millions of miles or less than an inch. Indeed, we should not know for the time being that there was any other world than the psychical, which would then be wholly engaging our attention.

We are at all times surrounded by the phenomena of two worlds, the physical and the psychical. When we make use of the brain we are in percipient relation with the former; when the use of this organ is dispensed with, we are in percipient connection with the latter. And such is the realization and implicit confidence that we place in our sensations and perceptions while dream-

ing, that if it were possible for some personage to appear to us in one of our nocturnal visions and assert that we are surrounded by another world besides the one then engaging our attention; and were he to assert that the world to which he referred contained vast continents, mountains, oceans, islands, and rivers, and that the rivers referred to were in no respect inferior either in size, length, or importance, to those of the Mississippi, the Amazon, the Danube, the Nile, or the Volga; and that to bring this world into view, it was only necessary for him to touch a nerve of our body, we should at the time be disposed to look upon such a statement as being one of the greatest absurdity. absurdity of the statement would arise on account of our belief that the world which then occupied our attention was the only one of which we had any direct knowledge. And for like reasons, were we to make the unqualified assertion that at all times during our waking condition there is another world besides the physical, invisible to us and immediately surrounding us; that the latter world, though invisible to us, existed in complete relativity and objectivity to the thoughts of the mind; and that it required only a slight change in the condition of our nervous system to bring this subtile world into immediate view, such a declaration as this would be looked upon by every one with perfect surprise and incredulity. Nevertheless, such a world as the one to which we refer is made present to us times almost without number when we sleep. Each world is therefore brought to our immediate attention and view by alternate conditions of the brain and bodily senses. When asleep we are dependent upon the mind's linking its action with the brain, to bring the physical world into view; when awake, we depend upon the disconnection of the mind with the brain-action to bring the subtile world of the soul into direct percipent view. Both worlds—the psychical and the physical, the spiritual and the material—exist simultaneously and at all times around us, whether awake or asleep.

In dreams everything presented to our view belongs to the supersensual; the vision itself is, as it were, lifted completely above the plane of the physical. No man will for a moment contend that the objects of a dream are physical; hence they must be hyper-physical. this state everything that appears is hyper-physical; the soul itself is in its very nature hyper-physical; the thoughts are hyper-physical; their accompanying emotions are hyper-physical; the sensations and the perceptions of the mind are hyper-physical; the objective phenomena are hyper-physical; thus everything belonging to this state is hyper-physical—spiritual. In this realm of mind everything but the soul is the production of the soul, and formed for its use. When the soul makes use of the sense-organs of the body, its action in connection with the organs is intra-organic; but when acting independently of these organs, as in dreaming, action is supra-organic—hyper-physical, suprasensual, and spiritual. In dreaming, everything per-

taining to the operations of the soul is undergoing unceasing change from thought to phenomena, and from phenomena to sensation and perception; there is nothing permanent but the soul; the soul perdures through all change and through all time; it ever remains the same sentient, personal, thinking being. thoughts produce objective phenomena in dreaming, and how the phenomena are enabled to produce corresponding sense-impressions upon the several senses of the personal soul, will be shown further on, thus illustrating the fact still more conclusively that man is a microcosm or little world, largely endowed with intellectual capability and powers of producing a spiritual counterpart of the phenomena of the macrocosm, or great world. The capability of the soul to exist and act independently of the body has been the subject of most earnest thought and inquiry from time immemorial. But before proceeding farther in this direction, we must first take up the subject of inspired dreams and visions.

May 17 m

## CHAPTER IV.

## INSPIRED DREAMS AND VISIONS.

Section 1.—Inspired Dreams.

X E are now about to enter upon one of the most remarkable features pertaining to the subject of dreaming; viz., that of inspired dreams. It is remarkable, indeed, that the Creator should have first put the brain and nerves of sense to sleep in order to enter into the presence of the soul of the seer for the purpose of conveying important information to man in regard to matters pertaining to his future state of existence. While men have looked upon the dream operations as being entirely unworthy of their attention, the Creator has bestowed upon this class of our mental powers the highest honors, by entering into the immediate presence of the soul while its conscious powers are acting independently of the brain and sense-organs of the body. It may be very truly said, however, that these operations when brought under the controlling influence of the will far outstrip those pertaining to the waking state of the brain. Could we always reason in our dreams, we should at these times be in possession of a purely spiritual, deliberative state of the mind, wholly unattainable by the use of the brain and other bodily organs.

The fact that this class of powers has been so highly honored by the Creator—not only in providing for their existence, but in evoking their use for the purpose of conveying important information to man—is a sufficient apology for us in giving the amount of time and attention which we have bestowed upon them.

A revelation communicated to the soul in sleep must proceed upon the principle that the consciousness may become the recipient of knowledge at such times, and that there are other senses which may be called into requisition besides those of the body; and also, that these senses may be the recipient of other phenomena besides those of the material—a class of phenomena which we have heretofore shown to be super-sensual and It is a well attested fact that our intellect is percipient of a certain class of phenomena while asleep and acting separately from the brain and bodily senses, of which the latter senses receive no impression or intimation whatever. The principal reason, no doubt, for selecting this condition in preference to the waking state of the brain and organs of sense to communicate with the soul in regard to a future state of existence is, that in external nature everything proceeds in strict accordance with certain fixed laws; while in dreaming, a phenomenon of any kind—it matters not how strange or how remarkable the phenomenon to be adduced-it may be instantly produced simply by evoking the natural laws of the soul-a class of laws which are constantly brought to our immediate notice and observation when

the brain is asleep. Hence, dreaming, or vision, as it is often called, has been generally selected whenever any remarkable occurrence or display of phenomena that was entirely at variance with external nature was intended to be presented to the eye of the prophet or seer. There are, then, two very different classes of phenomena, and two very different inlets by which the consciousness may be approached; viz., the outer senses, which belong to the body, and which place us in percipient connection with the phenomena of matter; and the inner, which belong to the soul, and place us in percipient connection with phenomena of a spiritual nature. For even when awake it is not the external organs of the body that see and hear, but the sentient or spiritual occupant of the body that resides within us, and uses these organs simply as an instrumentality. As above stated, all revelation made to the soul when the body is asleep, as in dreams or vision, proceed upon the principle that there are senses in the soul that are capable of being addressed by a peculiar class of phenomena suited to their nature. In support of the bonafide existence of this class of sense-powers and of their corresponding psychic phenomena, as well as their perfect reliability to attest the presence of objects, we have, as has been already shown, a twofold class of facts; viz., the scientific facts of our self-consciousness, which are the only data we have for the operations of the mind, either asleep or awake; and the authority of revelation, of which we are now about to speak.

When the brain is awake we are placed in percipient connection with the phenomena of matter; when the brain is asleep, we are placed in percipient connection with another class of phenomena, which we have shown to proceed wholly from the mind, and hence are spiritual, or rather psycho-spiritual, in their nature. Dreaming then ushers us, as it were, upon the confines or borderland of another life, where nothing appears to view but the soul and its own phenomenal scenery, which, under a steadfast law of mind, is presented to every man alike in the form of nocturnal vision. Thus nature never works by halves, but whatever is essential to the intellectual welfare of man is liberally bestowed alike upon all. It is strange, indeed, when viewed in accordance with modern thought, that the state of dreaming should have been selected by the Author of our being to communicate with the soul on matters relating to its present and future state of existence. Nevertheless, such has been the fact, as we shall now proceed to show.

Every dream—whether natural or inspired—must proceed directly upon the principle that there are senses in the soul capable of being addressed. Thus we read: "In a dream, in a vision of the night, when deep sleep falleth upon men, in slumberings upon the bed; then he openeth the ears [sense of hearing] of men, and sealeth their instruction." \* And then again, referring to this subject rather in the light of prophecy: "It shall come to pass afterwards, that I will pour out my Spirit

<sup>\*</sup>Job xxxiii, 15.

upon all flesh; and your sons and your daughters shall prophesy, your old men shall dream dreams, your young men shall see visions." He who formed the soul and endowed it with the class of powers just referred to, has from time to time evoked those mysterious laws for the purpose of holding direct and repeated converse with the soul of man. Thus it was in a dream that God appeared to Abimelech, warning him against an unlawful marriage; it was in a dream that Jacob saw a ladder extending from earth to heaven; it was in a dream that the announcement was made to Joseph of his coming elevation, in which the sheaves of his brethren were seen bowing in reverential obeisance to his sheaf; it was in a dream that the chief butler was promised a discharge from confinement in prison; it was in a dream that the chief baker was foretold of his decapitation; it was in a dream that the seven years of plenty and seven years of famine were announced to Pharaoh; it was in a dream that Solomon was proffered a choice of wisdom, riches, and honor; it was in a dream that Nebuchadnezzar was informed of the approaching downfall of his kingdom, which was presented to him under the figure of a great image standing before him; it was in a dream that the coming of Christ was announced to the world; it was in a dream that Mary, the mother of Christ, was warned to flee into Egypt from before the face of Herod; and it was in a dream that Pilate's wife was warned against the persecution of Christ. But as there are numerous instances of this nature, which

we shall have occasion to consider somewhat in detail, we shall not extend the enumeration of these cases any farther until we take up the subject of visions in connection with the *entranced* condition of the body.

In the ordinary visions of the night the thoughts of the mind seem to drift along in an aimless manner, without anything to direct their order of succession. except perhaps the laws of suggestion and the association of ideas. While in inspired dreams the current of thought is, for the most part, brought under the controlling influence of the will-power, which then acts in connection with the other faculties of intelligence. Generally speaking, where the subject of inspired dreams is referred to in the pages of Sacred Authority, the condition of the body and mind are both mentioned: the former, as being in a state of sleep; the latter, as being engaged in the exercise of thought, with its accompanying objective scenery, which is, for the most part, capable of being very minutely described; and sometimes, though not always, mention is made of the presence of a celestial personage, apparently en rapport with the dreamer or seer. In the case of Nebuchadnezzar's dream we have a distinct account given of the condition, both of the body and mind, in connection with a great image which appeared to himnot as a mere figment of the mind, but standing on its feet before him.

History informs us that in ancient times the kings of Egypt and of Babylon were accustomed, after the

observance of certain rites and ceremonies, to sleep at least one night in their temples for the purpose of consulting their heathen deities in regard to the interpretation of their dreams, which were believed to have an ominous bearing upon themselves and the future prosperity of their respective kingdoms. we read in the instance of Nebuchadnezzar, the king of Babylon, that the dream above referred to had been (as is very commonly the case with most dreams) entirely forgotten. It was for the purpose of recovering this forgotten dream that the king called together his council of wise men, but there was none found among them that was capable of giving a description of the dream and its interpretation, except the prophet Daniel. A full description of all the remarkable phenomena of this dream was presented to Daniel in a The recovery and reproduction of this forgotten dream might have originated in the mind of the seer somewhat in the order and manner following: We have elsewhere shown that to think in sleep is to dream. Accordingly, if the thoughts of the dreamer were brought under the controlling influence of the will of another, as in the case of mind-reading, a forgotten dream might be reproduced through the mind of a celestial personage with whom the interpreter was at the time en rapport. That there is such a law of mind as above mentioned, in which mind acts upon mind so as to control and give direction to the thoughts of another, appears to be well authenticated in many instances during the waking state of the bodily organs. And if this may take place in the waking state of the brain, how much more readily might it be brought about in the dream state, where the mind is acting independently of the brain and sense-organs of the body! Whether this be the true explanation or not, the state of dreaming has been selected as a favorable condition for conferring with the mind by means of the inspiration of thought directing thought. forgotten dream was shown to the seer in a dream. No doubt the entire phenomenon was presented to the seer in the same form that it appeared to the Babylonian monarch, and in accordance with a like consecutive train of thought. The same thoughts in sleep will always produce the same dream phenomenon. the one case. Nebuchadnezzar was the sole author and observer of the phenomenon, while in the other the seer was the author and spectator of the fac-simile which he reproduced. All dreams are of a personal and private nature. In Daniel's dream there was a rational exercise of the mind; for we read that "Daniel had understanding in all visions and dreams." \*

Mind undoubtedly has its own system of laws, which operate as uniformly in its own sphere as do the laws of matter in the chemical world. We can not rationally suppose that nature in one sphere is placed under a rigid system of law, while the other is left to utter confusion and chaos. There can be no doubt

<sup>\*</sup> Dan. i, 17.

that the reign of law is as complete and universal in one department of nature as in another, in the sphere of mind as in the sphere of matter.

Nebuchadnezzar, finding an interpreter in the prophet Daniel, received the following description of the forgotten dream, which, with its interpretation, he had so anxiously sought: "Thy dream and the vision of thy head upon thy bed are these; as for thee, O king, thy thoughts came into thy mind upon thy bed, what should come to pass hereafter. . . . O king, sawest, and behold a great image. This great image, whose brightness was excellent, stood before thee; and the form thereof was terrible. This image's head was of fine gold, his breast and his arms of silver, his belly and his thighs of brass, his legs of iron, his feet part of iron and part of clay. Thou sawest till that a stone was cut out without hands, which smote the image upon his feet that were of iron and clay, and brake them to pieces." \* It is not our purpose to consider the prophetic nature of the above dream, neither in respect to individual history, nor to the world's history, but to view it simply in relation to the bona fide existence of its objective scenery, as spiritual phenomena of the mind. We find in the case just cited three leading facts presented to our notice, which facts appear in all dreams alike, whether natural or inspired: First, the condition of the body, which was that of sleep; second, the thoughts of the mind;

<sup>\*</sup> Dan. ii, 28-35.

and third, the appearance of objects presented to the consciousness of the dreamer. In the detailed account here given, a distinct reference is made, not only in regard to the condition of the body, which was that of sleep, but also to the troubled condition of the thoughts of the mind that gave rise to the image which, as an object of sight, stood before him. Now, if we were to explain this dream in accordance with the views commonly entertained upon this subject-viz., that the image represented as standing before him was not a tertium quid, or third something, differing both from the mind and its acts—we should, in that case, be constrained to deny the existence of any and all such phenomena as bona fide and external to the mind of the dreamer. Taking such a view of the case, the object standing before him would be regarded simply as one and the same thing as the mental act. Thus the image and the act of the imagination have been regarded by many metaphysical writers as being one and the same thing. Taking this view of the subject, the image is not a product of the mind objectively presented, but simply a mental act or concept of thought. Such a position as this would entirely destroy the objective scenery of dreams, both natural and inspired. But if we deny the fact of the real existence of the objects presented in the above instance, as is commonly maintained in regard to dream objects in general, then there was no image presented, neither to the seer nor to the monarch, as above described, and accordingly,

if there were no objectified image standing before him, then there was no dream. And without a dream, the interpretation founded upon such a view was utterly Either the entire content of the vision—the thoughts and the image which, as an object of perception, stood on its feet before him-was true, or else all was false. We can not consistently accept the vision in regard to one part as true, and reject the remainder as false, simply to carry out some preconceived theory of our own in regard to mental philosophy. are compelled in this instance to admit the fact of the existence of the image as described by the seer, then we are forced to admit the real existence of objects in dreams; for if there were no object as described, then there was no image, and without the image spoken of the revelation predicated upon such dream or vision (for it is called both a dream and a vision) as related in the Book of Daniel, is absolutely false. The reader may choose which horn of the dilemma he will accept. He must either admit the existence of objects affecting the senses of the soul-not those of the bodyin dreams, or reject the Divine authority upon which this dream is supposed to rest. The objects that attend at such times always appear and disappear with the thoughts that they represent, and, for the time being, are, to the dreamer, as real in their nature as are the thoughts that accompany them. Thus we can not think without there being an objectified phenomenon attending the thoughts; nor can there be

in this state a phenomenon without an accompanying thought. To think in sleep is to dream. Hence, in order to recover the forgotten dream, it was only necessary for the thoughts of the seer to be directed by a personage with whom the secret nature of the dream was known and with whom the seer was at the time en rapport. It appears to be a well-known law of mind for thought to suggest or inspire thought in the mind of another, either directly or indirectly, both by signs and by words.

The laws of the soul as manifested to us in dreaming have been, from time to time, brought into requisition on all such occasions as the above, requiring the production of phenomena that are at variance with the known laws of external nature. Thus the stone cut out without hands which smote the image on its feet grew, perhaps, in a moment of time (for time is almost annihilated in dreams) into a great mountain that filled the whole earth. The mind is capable of producing objects during the momentary flight of a dream that all the combined forces of external nature could not accomplish during incalculable ages of time. This is owing to the fact that material nature has its own particular class of laws which always operate steadfastly under its own special requirements of time, while the phenomena of a dream are regulated wholly by the laws pertaining to the phenomena of thought. Were we to ignore the latter class of mental laws, it would completely undermine a great part of the authority upon which revelation is based, as well as to undermine the authority of consciousness, upon which the whole philosophy of the human mind is predicated.

It is no doubt for reasons stated above that the Creator has so frequently evoked these special laws of the mind whenever an order of things was about to be presented to the dreamer and seer that differed in a very striking manner from the process going on in the realm of matter. We have a remarkable occurrence of this nature related in the case of Jacob's dream of a ladder stretching across the incalculable space that separates the heavens from the earth. physical nature, an occurrence such as is here described would be impossible without violating almost every known law of matter. Taking the physical view of this case, in which the earth is known to be turning upon its axis at the rate of a thousand miles an hour, and at the same time moving in its orbit at the immense velocity of more than one thousand miles a minute, it would seem utterly impossible for so frail a structure as a ladder to rest upon such a movable foundation as this, without its structure separating before reaching the inconceiveable depths of the milky way. If we take also into consideration the fact that light travels at the rate of one hundred and eighty thousand miles a second, it would require years to traverse this mighty void before reaching the earth, so as to render visible to the seer the One standing above it; and so it may be said in regard to the sense of hearing, it would require, under these circumstances, an inconceiveable period of time for vocal sounds to pass from the top of a structure like the one above described before reaching the earth and ear of the dreamer. But while such an occurrence would be regarded as utterly impossible, when viewed in accordance with the laws and processes of external nature, nothing could be more readily accomplished under the well-known laws of mind, as witnessed by every man in dreaming. And this, indeed, is the true and only way in which revelation describes the phenomenon in question to have taken place. We are told it was a dream. In the physical realm, as just stated, such a phenomenon would be quite impossible, while in accordance with the laws of the human intellect, in dreaming nothing could be more easily accomplished than the phenomenon above related. He who is the Author of all law is also a respecter of law, and hence has from time to time evoked this mysterious class of subtile laws whenever a phenomenon about to be presented to the human soul was entirely different from the familiar order of material things. The calling forth of this mysterious and hidden class of laws of the soul in the way and manner above described reminds us of the truth and force of that familiar saying, "There are more things in heaven and earth, Horatio, than are dreamed of in your philosophy." In the instance related of the above dream, the

patriarch was lying upon the ground, with the head resting upon stones for its pillow. The body was asleep, the soul was dreaming. By the sleep of the brain the seer was placed in the midst of hyperphysical phenomena—a class of phenomena from which all material objects are excluded, where nothing appears present to the dreamer but the soul, thought, and its attending objective scenery. In the midst of this psychical realm and scenery a ladder appeared, upon which angels were ascending and descending in the presence of the seer. In inspired dreams the soul does not ascend into the supernatural; but that which is sometimes regarded as supernatural may be presented to the seer through the well-known subtile phenomena that surround the soul in a dream. into consideration the fact that certain conditions of the body and mind are requisite in all cases of this kind in order to establish such intercourse with the soul through the private channels of thought (for all dreams, with their attending phenomena, are private), such dreams as above mentioned may be regarded as belonging to the preternatural rather than to the supernatural. Inspired visions appear to be based upon certain known laws of mind, and hence are conducted in accordance with the operation of these laws. Thus mind has its own system of laws which govern its operation with a like certainty as those which govern in the physical world; and dreaming affords a favorable opportunity for bringing many of those laws into view that are unknown to the waking state. The physical world has its own established laws of intercourse, and so it may be said of the world of vision. In inspired dreams the soul of the seer, while acting separately from its bodily organs—the brain and senses—is apparently brought en rapport with soul that is disembodied. Mind in these cases is placed by some mysterious law of mind into direct intercourse with mind; hence dreaming affords a favorable opportunity for presenting to view such phenomena as are entirely incompatible with physical laws and method.

On what other principle than the method here referred to could we explain the phenomena of a vision like that of the burning bush which was not consumed? No such occurrence as here mentioned could have taken place under the operations of the laws pertaining to the chemical elements of the world. These elements. and the laws that govern them, have been ordained solely for the support of material objects; but there is a class of laws like those which we witness in the dream-phenomenon, that are lifted entirely above the operations of physical nature—laws which have been placed by the Author of our being far above the reach of chemical affinities and chemical action. of the psychical have been found abundantly sufficient to convey a certain class of facts to the human soul that are entirely at variance with the regular order of external nature; hence their complete adaptation to communications of this kind. Any attempt to ex-

plain phenomena of this nature on the basis of purely physical laws and method would be futile in the extreme; but when viewed in accordance with the wellknown facts and laws of mind, as presented to every one nightly in vision, nothing could admit of a more easy solution than the occurrence above mentioned. On no other principle than the one here referred to could the remarkable phenomenon portrayed to Ezekiel in the description of the "valley of dry bones" admit of rational solution. When viewed in accordance with the well-known laws of vision, as we find exemplified in the natural powers of the human soul, nothing could be easier than for the mind of the seer to produce such a scene as here described. On this plain, each bone was seen to arise and join its fellow until a great moving multitude stood up, clothed with sinews and flesh. There is nothing here described that would be impossible for the mind to perform in a nocturnal vision, provided the thoughts of the dreamer were directed in such logical order as to reconstruct the human form. Any individual having a like purpose in view might reproduce a like occurrence in which the bones of a vast army of the dead might be made to reappear in a dream—in an ordinary vision of the night—provided the will was acting with the same freedom as the other faculties of intelligence. With the will acting so as to co-ordinate the thoughts at such times, we could produce any scenery that we might desire simply by a voluntary exercise

thought. Are we justified, then, in denying the existence of such a phenomenon as the above simply because it is contrary to the laws of external nature, when there are well-known laws in the human mind by which such facts may be readily accounted for? Did the rational faculty operate at all times during sleep and dreaming, our dream-life would afford an opportunity for a rapid rational exercise of the mental powers far outstripping those of the waking life. But in general the rational order of mental exercise is an exception to the rule in this state, and when it does occur, it is commonly fitful and of short duration. The reason of this has been already explained.

The question may be asked, and it is entirely pertinent to the case, Was the phenomenon of the burning bush simply a vision? The answer is, The phenomenon here in question appears to coincide perfectly with this class of laws. Take the case of the patriarch Joseph, who dreamed of being in the field binding sheaves with his brethren, in which all the sheaves arose into an upright position, and those of his brethren made obeisance to his sheaf. Had not this occurrence been handed down to us as a dream, we should nevertheless have been compelled to explain it in accordance with this class of mental laws, for the reason that such phenomena, being incompatible with physical laws and method, are found to agree in all respects with psychical laws and phenomena. The same remark is applicable to Joseph's dream, in which the

sun, moon, and the eleven stars were seen making their obeisance to him. Had the story thus related been handed down to us without stating the fact that it was a dream, we should nevertheless have been compelled, on account of the character of the phenomena mentioned, to view it simply as a vision, and not as an actual disturbance of the planetary system. Such, indeed, is the ease and facility with which the mind produces its objects in dreams, that phenomena may appear to us in any and every conceiveable manner and form, simply as the products of our own thoughts. Having now considered a few of what may be regarded typical dreams related by writers of Sacred Authority, we propose to pass to the consideration of the subject of trance, which forms the basis of some very noted visions related by the inspired penman.

## Section 2.—Trance.

In trance, as well as in sleep, there is more or less lethargy of the brain, in which the mind is, in some instances, capable of setting up an action independent of this organ and its dependent sensory nerves, similar, in many respects, to that which takes place in dreaming. In both sleep and trance there is an *untoned* or enervated condition of certain parts of the nervous system. In both conditions we have a diminution of the toning nerve-current, upon which the proper functions of the nervous system depend. In sleep, this diminution of tonicity is natural and *normal*, while in

trance the diminution of the toning-current is preternatural and abnormal.

Besides that special differentiated nerve-current required for toning the brain and its system of sensory and muscular nerves—that part of our nervous system directly connected in the performance of the mental operations—there is a somewhat similar subtile toning current circulating throughout the whole extent of the ganglionic system of nerves, that part of the nervous system directly concerned in carrying on the vital functions of organic life. This toning-agent serves to aid the nutritive functions in the formation of the organic chemical compounds, of which the numerous tissues of the body are composed. If, therefore, this subtile nerve-current should, from any cause whatever, become partially arrested or greatly weakened in both classes of nerves, we have an enervated condition of the entire nervous system, known as trance. some instances this enervation becomes so great as to suspend almost entirely the action of the heart and lungs, simulating, as it were, the sleep of death. close, indeed, is the resemblance that sometimes takes place between trance and death that it may even become difficult for the medical attendant to determine whether the case is one of suspended animation simulating death, or one of real death. In some instances the approximation to death is so close that the only evidence of life remaining is a very slight degree of animal warmth. In natural or normal sleep, the loss

caused by the waste of nerve-cells—those cells upon which the toning nerve-current of the brain and senses depend—is soon restored by the process of nutrition; while in cases of trance the loss of that class of cells furnishing the toning current necessary to carry on the functions of the ganglionic system of nerves—that system upon which the operations of life depend—is sometimes very slowly replenished on account of the almost entire suspension of the nutritive powers. The diminished nutrition in these cases is owing to the almost entirely suspended condition of the heart's action, resulting in great diminution of the circulation of the blood. This form of nerve-depression is also attended with a suspended condition of the respiratory movements of the lungs. An extreme depression of the vital powers, like the above, may arise from a variety of causes, among which may be mentioned strong emotional excitement of the conscious physical powers. The depressing emotions, which belong to the conscious class, may exert a depressing influence upon the unconscious or vital class of the psychical powers, which are concerned in carrying on the functions of organic life, thus lowering the tone of all the bodily functions. It is here worthy of remark, however, that the suspended condition of the nerve-current does not, in every instance, extend to all the different parts of the nervous system alike. have an exemplification of this fact in cases of partial and temporary paralysis, in which the suspension of tonicity is limited to that class of nerves whose office is to carry on the muscular movements of the body. In like manner we may have, in certain instances of trance, a suspension of the nerve-current and consequent suspension of normal tonicity, extending only to a certain part of the nervous system, as the voluntary nerves, which preside over the voluntary muscles. Accordingly, we have cases of this partial nature where the brain and nerves of special sense may be receiving only a partial supply of toning influence, just enough to enable the mind to operate in the process of thought and emotional feeling in connection with the brain and senses, while at the same time the vital functions are at such low ebb as to be able to maintain scarcely a perceptible degree of animal warmth. An individual thus situated may be able to see his friends standing around him, and hear their remarks in reference to his supposed dissolution. He may even witness the preparation which is going on for his interment without being able to move any of his voluntary muscles—such as those concerned in the movements of his limbs, eyes, eyelids, and vocal organs. In this motionless condition of the body there is a complete enervation and entranced condition of the motor-centers (corpora striata) which preside over the voluntary muscular movements of the body, while at the same time the other parts of the brain and the nerves of sense may be receiving a partial supply of the innervating nervecurrent, sufficient, at least, to enable the mind to carry on, to a certain extent, the exercise of thought. But in other cases of trance, as where the enervation extends to both systems of nerves—as the brain and its centers, the ganglionic system of nerves and its centers—the brain may pass into a state of great lethargy, like that of profound sleep, in which the mind is capable of setting up an action independently of this organ and its dependent nerves of sense, quite similar to that mental action which takes place in dreaming.

It is only in those entranced states of the nervous system where the toning influence of the brain has been brought to a condition like that of deep or profound sleep, that in former times have been selected as a favorable opportunity for evoking the laws of mind in cases of inspired visions. Indeed, it may be said that it is only in the enervated states of the brain, like that of sleep and of trance, that inspired dreams and visions have been alluded to by the Old and New Testament writers as affording a favorable opportunity for carrying on intercourse with the soul in the form of rapturous vision. In the case of the prophet Daniel, whose visions were not only numerous but of great variety and character, we have in every instance a description given of the body, which was always spoken of as being either in a state of sleep or else in a state of extreme prostration, like that of the entranced condition. The same may be said in reference to the visions of the New Testament. The state of the body is generally described as being in a prostrate condition, like that of sleep or trance, while the mind is referred to as being in a state of active operation.

Both Peter and Paul seemed to possess that peculiar tendency of the nervous system which rendered them liable to the entranced condition of the body. Thus Peter at one time, being overcome by a sense of hunger while on the house-top, fell into a trance, and saw in a vision a sheet let down before him. And at another time, while in prison, sleeping between two soldiers, he fell into a rapturous vision. In the various untoned conditions of the brain, as in sleep and trance, the mind, unable to connect its operations with the brain—its organic instrument—is sometimes capable of such independent action as above mentioned. is an endowment bestowed upon every man alike to experience visions during sleep. But there are certain mental capacities or powers peculiar to some that are not possessed by others. Thus Peter, with certain other disciples, possessed the rare quality of receiving instruction by means of rational visions. We see this remarkable quality of mind and brain exemplified in the instance of the Transfiguration, where Peter, James, and John were selected, separate and apart from the other disciples, to witness this remarkable occurrence an occurrence in which they were all represented as simultaneously falling prostrate to the earth, apparently entranced. Matthew relates the occurrence which here took place as a vision, and all visions require a quiescent or dormant state of the brain. In regard

to the contents of this vision the several evangelists agree; but they differ somewhat in their description of the physical condition of the body. One describes the disciples present as being heavy with sleep; but all agree in regard to the prostrate and helpless condition of the body which befell them.

But how shall we explain this condition, this sudden and simultaneous prostration of the disciples on the occasion above mentioned? And why were only three of them selected from among the others to witness this remarkable apparition? Was it on account of a physiological predisposition of the three here spoken of to become enervated through the sudden loss of nerve-power that they fell prostrate to the earth, as it were, completely entranced? In the case here referred to there seems to have been a complete suspension of the functions of the nerves of external sense and muscular motion; for upon the restoration of sense and motion the disciples called upon to witness this occurrence, when looking up, saw no one but Christ standing before them, the other personages of the vision having entirely disappeared from view. The personages here alluded to disappeared, doubtless, for the reason that in their spiritual form they were not cognizable to the external organs of sense. By the inner sense alone can we perceive only the spiritual; so by the outer we perceive nothing but the physical. this instance, the description of the vision precedes the description that is given of the condition of their

bodies, for the reason, no doubt, of the paramount importance of the former over that of the latter. But how are we to explain that instantaneous prostration which their bodies simultaneously underwent, unless it was by means of nerve-depression which suddenly overcame them? And was this loss of nerve-power brought on by a sudden, indescribable fear or dread of something about to befall them, which struck feelings of terror to the soul, causing the nervous system to weaken and wilt down as suddenly as if they had all been struck by a blow upon the head? We are informed, in connection with the account, that great fear fell upon them. Was this sudden fear, then, caused by an intimation or unexpected announcement that Moses and Elias were there, standing in their midst, ready to be revealed to them, and that this could be accomplished only by an entranced condition of the brain and vital energies? Be this as it may, there seems, in this instance, to have been a sudden prostration or failure of the nervous energy sufficient to cause all three of them to fall suddenly and simultaneously to the earth. It must be remembered that the disciples were not free from all emotional feeling of dread or fear; for after this occurrence we are informed that Peter, fearing the multitude, denied his Master. At another time, in attempting to walk upon the sea, his faith failed, and he cried out for help, lest he might sink beneath the waves. Whether this be the true way of accounting for the helpless condition

of the body at the Transfiguration or not, it seems to be in all cases of visions, whether natural or inspired, a necessary prerequisite that the brain and senses should be in a state of suspended activity, such as takes place in the untoned states of trance, sleep, and dreaming. As the condition of the body was always thought to be worthy of mention by the several evangelists whenever an allusion was made to the subject of visions, it would seem to be well worthy of our consideration and attempted explanation on physiological principles.

Is it not indeed very remarkable that such a state of the brain should have been uniformly selected in preference to the active or waking state of this organ, in order to communicate with the soul of the seer in all cases of inspired visions? No doubt the true reason is that no such visions, either natural or inspired, can take place in the normal waking condition of the brain, but must in all cases depend upon an untoned or inactive condition of this organ and its dependent In order to develop such phenomena, it is very evident that certain states or conditions of the body are as requisite in their production as are certain conditions of the mind. That which sometimes appears to us to depend on supernatural agency or special infraction of certain laws of nature may, upon more careful examination of the case, be found to depend upon the operation of some unobserved law of the human mind, as in the instance just related, as

well as in the numerous instances of dreams and visions referred to by the Old and New Testament writers. Such, indeed, appears to have been the common mode of communicating in former times between the worlds of the living and the dead. The disciples were, no doubt, chosen from among the great multitude of men on account of their peculiar fitness of mind and brain to serve in the work for which they were severally called. Some appeared to be distinguished on account of their natural aptitude for visions, some for their powers of moral suasion, while others appeared to have been chosen on account of a peculiar gift of tongues or prophecy. The three disciples who were called upon to witness the Transfiguration were evidently selected from among the others on account of a peculiar susceptibility of their nervous system to fall into that entranced condition which rendered them fit subjects to witness this remarkable apparition.

In order to understand how the mental emotions operate upon the vital forces of the organism in temporarily suspending the functions of the nervous system, as in cases of trance, let us for a few moments advert to the fact already pointed out, that the soul builds the body, that it differentiates the anatomical structure into all its parts, and likewise differentiates all the various functions of the several parts and organs of the body. It not only carries on the functions of the different parts, but keeps all the parts in repair; for if the soul can make use of the body it can certainly

keep the parts in repair to subserve such use. In order to perform this work, the personal soul must stand in constant causal relation to each and every part of the personal organism. This relation, as we have elsewhere shown, is maintained and carried on through one class of the psychical powers; viz., the unconscious, instinctive, which are unceasing in their operations from the commencement of life to its close; while the other class, which are known and designated as the conscious or mental powers, make use of the body in the performance of the various operations of intelligence. The one class, then, operate instinctively, unconsciously, and involuntarily, while the other class of the psychical powers are conscious and voluntary. Taking this view of the psychical powers in reference to the anatomical structure and the physiology of the animal functions, it is evident that the soul, when greatly disturbed in one class of its powers, will exert more or less disturbing influence upon the other class, as we often see manifested in the physiological functions of the body. Hence the fact is well known that any decided disturbing influence arising in the mental powers-such as great fear or any very sudden and saddening news-will serve to disturb or greatly depress the organic functions; and, vice versa, any serious depression of these functions may result in deep disturbance of the mental operations. We may in this way account for the well-known reciprocal influence of the two classes of powers upon each other in the disturbance of the bodily functions; for as both classes of powers inhere in the same personal soul and are respectively connected in their operations with the two classes of functions of the body, any serious, disturbing influence arising in one class of the psychical powers must exert a disturbing influence upon the other and its corresponding bodily operations.

As proof of the disturbing influence of the mind over the body, how often are we called upon to witness persons of nervous temperament, accompanied with strong emotional tendencies, quake and quail upon the reception of some sudden and saddening news, which in very many instances cause the individual to fall fainting and prostrate to the ground! Thus, with certain individuals of peculiar nervous make-up, any very sudden and startling information received by one class of the psychical powers—as the mental—will often disturb and even entirely overcome the vital operations connected with the other class. Under this chain of psychical disturbance, in which the vital energies of the soul become more or less weakened and powerless, the bodily functions are correspondingly weakened, for the reason that the unconscious, instinctive, psychical powers stand in constant causal relation to the vital or nutritive forces upon which depend the production of the dynamic cells that furnish the toning current of the nervous system. Whenever, therefore, any sudden and saddening news is communicated to certain individuals of a decided nervous temperament, such

persons have been known to fall down as suddenly as if they had received a blow upon the head. It is in consequence of the effect of great emotional excitement acting upon the nervous system that the culprit, when receiving his sentence, will sometimes turn pale and tremble at the meaning of a word pronounced in his hearing. It is not simply the sound of the word that troubles him, but the meaning which his mind attaches to it, that agitates his frame. In some instances such persons will, when the death-penalty is about to be executed upon them, become perfectly limp and powerless on account of the mental influence at these times disturbing the vital functions—those functions which directly depend upon the unconscious powers of the soul. No doubt the effects here described would be much more frequent and strikingly manifested were such executions to take place in a more summary manner and with but little previous warning to the indi-Indeed, any great sudden emotional excitement will, in almost every instance, more or less powerfully prostrate the vital energies of the psychical artificer of the body; hence any exciting or depressing news suddenly imparted to the conscious or mental powers of the soul will cause some persons to swoon away on account of the immediate check it produces to the flow of the nerve-current, upon which the normal functions of the brain and other parts of the nervous system largely depend. We have instances related which strikingly illustrate this effect, where the exhaustion brought

about by the sudden check of the toning current of life becomes so great that the vital functions are completely and permanently suspended, resulting in the death of the individual. Hence we have syncope, trance, and even death itself, taking place accordingly as the suspension of these functions are partial and transient, or more or less prolonged, complete, and permanent. How often is it the case that in the midst of a very sudden alarm of fire some will instantly lose their reason, and fall powerless to the floor, without making any effort whatever to effect their escape from the raging flames that surround them!

Having thus briefly considered the effect of the depressing emotions—such as that of great fear in disturbing the vital functions—let us now return for a few moments to the facts presented at the Transfiguration, and see whether certain emotional disturbances, acting upon the nervous system of the three disciples present, were the direct cause of their becoming suddenly and simultaneously prostrated or not. In this instance there seems to have been such a peculiar tendency to and fitness for this condition of the nervous system as to render a part of the disciples proper subjects for receiving knowledge through the medium of visions. As stated above, they were, no doubt, selected from along the coasts of Galilee on account of their peculiar fitness of mind and brain to serve in the capacity for which they were chosen. Attracted by the personal appearance and character of Christ, he had but to say, "Follow me," and they straightway followed him. The great multitude of men with whom he mingled could not have been thus induced. That these disciples had a peculiar susceptibility and tendency of the nervous system to become entranced would appear evident from its frequent occurrence subsequent to the time of the Transfiguration, as we shall presently show.

Now, if, in connection with this peculiar tendency of the nervous system to become entranced, we should take into consideration that unlimited confidence which the disciples placed in the declarations and extraordinary power of their Master, it was only necessary for him to inform them that Moses and Elias—those timehonored worthies of the sainted dead—were then standing in their midst, ready to be revealed to them. But to bring about an apparition of this nature it was necessary that a certain change in regard to the functions of the brain and senses of the body should take place—such as that of the entranced condition—in order to bring those noted worthies of the long-venerated dead into their immediate presence and recogni-Such information as this, imparted to them at that time, would, no doubt, be well calculated to strike terror to the soul and bring about that simultaneous prostration of the brain and nervous system which was manifested by that complete helplessness that appeared to have befallen them on this occasion; for we are told, in connection with this occurrence, that great fear fell

upon them, and that the disciples fell upon their face, and Jesus came and touched them, and said, "Arise, and be not afraid." \* He who formed the soul and endowed it with the faculties of intelligence and with such other powers as those connecting it with the bodily functions, knew what chord to strike in the mental system to bring about the necessary result required at the Transfiguration. There can be but little doubt that the sudden and simultaneous enervation of the nervous system which befell the three disciples alike, was brought about by a dread of some impending danger which they thought was about to befall them. Had all the disciples been present at the scene of this occurrence, unless all were similarly entranced, there would undoubtedly have been a discrepancy in their several statements as to what took place.

In regard to the objects presented in this vision, there was no mixing of the physical with the spiritual. It has been heretofore shown that in dreaming we perceive only the psychical, that as the physical recedes from view the psychical appears in response to our thoughts. We can not perceive the physical, except when we employ the physical senses; nor can we, for like reasons, perceive the psychical—the soul and its phenomena—except by the separate use of the inner senses. The personal soul has its senses as well as the personal body; each class has its own appropriate class of objects—the physical for perceiving the physical, the psy-

<sup>\*</sup> Matt. xvii, 6-10

chical for perceiving the psychical. Nature proceeds in a definite manner in all her operations. Take away the physical senses, and you take away our ability to perceive the physcial. Both sleep and trance close the eye and ear to the physical, and open the senses to the recognition of the spiritual. At the Transfiguration the whole content of the vision was psychical. It was not the physical body of Christ that appeared to the disciples and shone with such brightness when standing in contrast with the other two personages. It must have been the soul—the Divine nature—that shone as the brightness of the sun on this occasion. Neither was it the raiment that covered the physical body that was as white as the light. Nature never presents her work in a mixed manner, but proceeds by law and definite The realm of mind has its definite course of procedure, the same as that which prevails in the realm of matter. The only instance in which both orders of phenomena are presented to view at the same time, is in somnambulism, where some one or more of the physical senses are asleep, while others are awake, thus placing us at the same moment of time in connection with both the physical and the psychical. When making use of the physical senses, we have the unmixed physical; when the inner senses are disconnected from their physical adjuncts, as in sleep and trance, we have nothing but psychical objects presented to our observation. The three evangelists agree in regard to their account of what they saw in the vision of the Transfiguration. The vision was, no doubt, on account of its paramount importance described first; and that of the condition of the body afterwards. The entrancement of the body and the occurrence of the vision must have taken place simultaneously. Taking the office, then, of the physical senses, which are expressly adapted to the perception of their own special class of phenomena; and the special relation of those of the psychical to their phenomena (of which we all have a similar experience when dreaming) we shall have no difficulty presented in regard to the operation of the psychical and the physiological laws which served to mark the above occasion. We have elsewhere shown that the phenomena that make up the dream-world are constantly pressing around us and about us, but are only brought to our view when the brain and physical senses are asleep. In reference to this class of phenomena, of which we are all familiar when the body is asleep, we should know nothing whatever in regard to the fact of their existence in relation to our thoughts were it not for their appearance in sleep.

In regard to the predisposition of the nervous system of those disciples present at the Transfiguration, of becoming entranced, but little is known above what has been already mentioned. Not very long after this occurrence, James, the brother of John, suffered martyrdom; hence but little is known of his history in regard to the subject of visions. We have already referred to the case of Peter, who, being overcome by a

sense of hunger while on the housetop, fell into a trance, and had a vision of a sheet let down before him. And at another time, while in prison, sleeping between two soldiers, he experienced what may be regarded a remarkable vision and liberation from imprisonment; and, lastly, though not least, the vision of the Transfiguration, as above referred to. This peculiar tendency to nerve-prostration, so common to the entranced condition, was also very strikingly manifested in the case of John at the opening of the Apocalyptic vision, where he is representted as falling down at the feet of the celestial personage as one dead. It was not death, but the appearance of death. He laid his right hand upon me, saying unto me, Fear not; I am the first and the last." In this particular instance, John experienced a similar emotional feeling of fear or dread to that which attended him at the vision of the Transfiguration. But before entering upon the subject of the Apocalyptic vision, we must first consider one or two instances of trance and vision mentioned by St. Paul.

There seems to have been a similar peculiarity or fitness of mind and brain to fall into the entranced condition in the case of the apostle Paul. Thus he informs us that, while on his way to Damascus to carry out his mission of persecution and death, he was suddenly overwhelmed by a feeling of great remorse, and, becoming terrified at what he was about to put into execution, he suddenly fell prostrate to the ground

-not unconscious, but physically helpless and apparently entranced. And while in this condition, he had a vision in which a bright light shone around him. That this was a vision appears from the fact that in relating the circumstance to King Agrippa, he says, "I was not disobedient unto the heavenly vision." \* "I saw at midday a light above the brightness of the sun shining round about me and them which journeyed And when we were all fallen to the earth, with me. I heard a voice speaking unto me." Those that were with him, becoming frightened at the sudden judgment that fell upon Paul, also fell to the earth apparently entranced. They saw the light, but did not hear the voice of condemnation and reprimand. Paul, having partially recovered from the shock of the brain and nerve-centers, but with the optic nerves still untoned and paralyzed. was led into the city of Damascus, helpless, amaurotic, blind. In this instance there appeared to be a similar prostration or entranced condition of the nervous system as that which characterized those cases above mentioned. Indeed, we have no instances of vision taking place-either natural or inspired—except in sleep and in the entranced condition of the brain; for in all cases where the mind is acting in connection with the brain and external senses, we have that condition of mental exercise known as the waking state, which places us in connection with the physical organs of the body. Thus we see that the

<sup>\*</sup>Acts, chap. xxvi, 14-19. See also chap. xxii.

deeply-entranced condition of the nervous system, like that of the untoned state of the brain in sleep, affords a suitable condition of brain and mind for holding direct intercourse with the soul by means of those peculiar phenomena known as vision.

In the waking state the acts of the mind take place in connection with the organs of the body; hence all such acts of the soul are, as we have already said, intraorganic; while in the untoned state of the brain, in sleep and dreaming, as well as in the entranced condition of the body, the thoughts of the mind arise independently of the enervated brain. These acts are supra-organic. When the mind is acting without the brain, all our acts of consciousness, like those of dreaming or vision, are hyperphysical. Thus the acts of seeing, hearing, etc., are all supersensual—supersensual for the reason that the corporeal senses are asleep and, hence, not catenating with the acts of the mind. We do not in this connection make use of the term supersensual in the sense of the supernatural; for while it is perfectly natural for the mind to act in connection with the organs of sense when these are awake, it is equally normal and natural for it to act without these organs during the untoned states of the brain in sleep. Both dreaming and trance, then, afford a favorable opportunity for holding hyperphysical intercourse with the soul at such times when the latter is placed en rapport with celestial personages. In cases of this kind we have hyperphysical acts of the soul, hyperphysical

personages present, and hyperphysical phenomena as visible manifestations of thought. In the numerous instances in which these channels of intercourse have been employed by the Author of our being, those states of the brain and senses known as sleep and trance have been uniformly selected in preference to the waking state of the bodily organs. In the waking state, the objective psychical phenomena are, then, invisible to us; while in dreaming this class of phenomena are always cognizable. Hence the applicability of these laws of the mind for carrying on hyperphysical intercourse with man in the form of visions. We say in the form of visions; for it is in this form only that all such revelations are made to the soul of the seer.

Let us now pass to another noted instance of vision occurring in the life of St. Paul, which in this connection deserves, we think, more than a passing notice. Not long after Paul's conversion, we are informed that on a certain occasion, while in the temple, he fell into an entranced condition, during which he witnessed a remarkable vision. In giving an account of this vision to his Corinthian brethren, he says: "I knew a man in Christ about fourteen years ago, whether in the body, I can not tell: God knoweth; such a one caught up to the third heaven; . . . and heard unspeakable words, which it is not lawful for a man to utter." \* We are told by commentators that this account referred to the time when Paul went into the temple to pray,

<sup>\*2</sup> Corinthians, chap. xii, 2.

and, while there, fell into a trance. No particular account is given concerning the nature and character of this vision, except that relating to the body, which was entranced, and that of the soul, which was caught up to the third heaven. Speaking of this vision, Paul incidentally refers to a question in philosophy which is deserving of more than a mere passing notice in this place; viz., Does the soul ever quit the body to make temporary excursions during a vision, whether natural or inspired? This question is one which, in some of its modified forms, had engaged the attention of philosophers several centuries before the time of the Hence Paul's reference to the question whether the soul was in the body or whether it was out of the body while in paradise, he declares that he could not tell. "God knoweth." The reply here given-"God knoweth"—leaves this question wholly unanswered and in the hands of the philosophers of his time. This is an important question, and hence one that can not be satisfactorily disposed of in a summary manner.

It was evidently not the entranced body which lay prostrate in the temple that was thus seemingly transported from earth to heaven, but the soul. It was the conscious soul—not the body—that witnessed the unspeakable and supersensible scenery of the vision; but whether the soul remained in the body, or whether it passed out of the body, he could not tell. Being a great scholar, Paul was, no doubt, perfectly familiar

with the teachings of the Greek philosophers of his time in regard to the numerous questions that agitated the minds of men in reference to the nature and powers of the human soul; for this subject had, from very early times, been one of close, patient thought. Writing to the Church at Corinth—one of the principal cities of Greece—he knew well their familiarity with the teachings of their own philosophers. In his first letters to the Corinthians, Paul informs us that dissensions had sprung up in the Church at Corinth. The Jews required a sign—i. e., a miracle—while the Greeks sought after wisdom—i. e., philosophy. To the Jews, his teachings were a stumbling-block; to the Greeks, foolishness.\*

For several hundred years before the time of the apostles there were two separate and widely-distinct schools of philosophy rife in the world; viz., the Platonic and the Aristotelian. Plato taught that the soul was eternal in its origin, and that it had traveled like an archer in his chariot through the immeasurable rounds of eternity before reaching the human body, in which at last it found a lodgment. On account of the great superiority of the soul over material substance, he maintained that between matter on the one hand and mind on the other there could be no immediate relation, such as direct contact existing between them; and without contact there could be no reciprocal action taking place between the soul and the body. Ow-

<sup>\*1</sup> Corinthians, chap. i.

ing to the total contrariety or entire want of relation between the laws of matter and spirit, Plato and his followers maintained that the soul was only indirectly connected with the body through and by means of a third principle, which they called plastic medium.\* This plastic medium was supposed, on the one hand, to be connected with the body by means of a certain class of laws having relation to matter; while on the other hand it was believed to be connected with the soul by means of a class of powers which were distinct from the former, and, hence, adapted to the special nature and powers of the soul. This intervening plastic principle, then, possessed a twofold class of laws, adapted at once, through a contrariety of separate powers, to both matter and mind. In this way, and in this way only, an indirect connection and intercourse was believed to be maintained between the soul and the body. At the time Paul was going from city to city, disseminating the doctrines of Christ, a school of philosophy was established at Alexandria, called the "New Platonists." The teachings of this new school were directly antagonistic to the teachings of Christianity.

At the time here referred to there was a ruling axiom in philosophy which governed the minds of men as with a rod of iron; viz., "A thing can not act where it is not." Thus the mind, which is supposed to be located within the body, can not act out of or distant

<sup>\*</sup>See Lect. on "Metaphysics," by Sir Wm. Hamilton, p. 213.

from the body without acting where it is not. To meet this difficulty, the Platonists maintained that, in accordance with the principles contained in the above axiom, the objects external to the body, which the mind perceives must go to where the mind is located say in the brain—in order to be present with the mind, where perception is commonly held to take place; or else a power of the soul must sally forthsay from the brain—to the distant objects, in order for the mind to be present with them in the acts of perception. The latter view was strenuously advocated by Plato and his immediate followers. As the body was formed before the soul entered it, it could exist, according to the Platonic view, without the constant presence of the soul, as when a principle of the soul sallies forth to the objects in the acts of perception.

On the other hand, Aristotle, a pupil of Plato, maintained that the soul built the body, and is, therefore, its vital principle. Accordingly he taught that the soul, being immediately connected with the body, is directly concerned in all its vital movements. It was therefore maintained by the Aristotelians, in direct opposition to the doctrine held by the Platonists, that, as the soul builds the body (which was then currently taught in all the early schools of Greece), whenever the soul leaves the body, the vital functions cease; hence, "the body without the soul is dead." Thus the Aristotelians held that in every act of perception the objects must, in some form or other, find their way to

the brain and mind through and by means of the different impressions made upon the nerves of the external sense. These impressions, which are supposed to be the true representatives of external objects, are conveyed by the nerves to the brain, where the impressions are perceived by the mind. For example, a picture of the external objects is formed upon the retina, and an impression of the image is conveyed by the optic nerves to the brain, where the mind is supposed to reside and act, and thus, without violating the principles embodied in the axiom, perception can take place. In this way subject and object are brought together. The different impressions of sense the Aristotelians called species. Species found their way to the brain and mind, where the acts of perception were supposed to take place. The term species, as employed by the Aristotelians, was not used to denote the external object itself, but was held to be the vicarious representative of the external object. Without entering, however, into all the teachings of the Aristotelians on this subject, the term "species" may be regarded in a twofold light: the first as truly representing the object and affecting the external sense; the second, which was elaborated by the mind into ideal phantasms, were supposed to be cognizable to us only in dreams.\* According to the Aristotelian philosophy, the dreamobjects proceed from the mind as ideal images repre-

<sup>\*</sup>See Appendix to Bain's "Senses and the Intellect," —" Psychology" of Aristotle.

senting external things. The first of these represents the objects of the external world, the second constitutes the objects of dreams. Thus the theory of the Aristotelian philosophy of perception was made to conform to the principles of the axiom, The mind did not sally forth to the objects, but the external objects, by their representative sensible species, were conveyed to the brain—the mind's presence chamber—where they are perceived by us. Viewed in this light, all our mental acts take place in the body, and not external to it, as was maintained by the early Platonists in reference to the perception of distant objects. The mind, say the Aristotelians, does not sally to the object, but the images of objects are conveyed to the mind.

On the one side or the other of these two rival theories of philosophy men have arrayed themselves from the earliest times of speculation down to the present. Indeed, so patent is this fact, that it has been tritely remarked that every man that comes into the world is born either a Platonist or an Aristotelian. In regard to the influence of the teachings of Aristotle on the minds of men, it has been said of him that for a period of more than two thousand years he held the world a slave. At the time of the apostles, Christianity found a powerful opposition in the teachings of the Neo-Platonists. Only a decade or two of years prior to the time that the apostles were traveling about from city to city disseminating the doctrines of Christ,

Philo, the Jew, a somewhat noted philosopher of that day, was at the head of a flourishing school at Alexandria, at which time and place the teachings of the New Platonists were taking a firm hold on the minds of men.

Even as Christ himself was often sought to be entrapped by the Jews, so Paul was besieged on every hand by the numerous questions presented to him by the followers of the Greek philosophers. In accordance with the principles of the axiom "that a thing can not act where it is not," it was urged by the Platonists that the soul of the apostle must have been, during the vision, temporarily transported to paradise in order to be immediately present with the things perceived by him; or else, while in the body, celestial things must have been represented to the soul of the seer somewhat after the manner of species or phantasms, as taught by Aristotle and his followers. Being learned in the Greek, and doubtless pressed for an answer to this question by the different advocates of the two rival schools of philosophy, Paul declared that he could not tell whether he was in the body or out of the body at the time of the heavenly vision. Had Paul taken the position that the soul left the body and was in paradise, while it might have satisfied those of his Corinthian brethren who had embraced the views of the early Platonists, it would not satisfy those who adhered to the teachings of Aristotle; for the latter would in that case have urged their favorite theory on this sub-

ject, which was that the soul was the life-vital principle—of the body, and hence, that the body without the animating soul is dead. So, on the other hand, had he fully coincided with the teachings of Aristotle. that the soul remained in the body at the time referred to, the Platonizing Christians at Corinth would then have urged against such a position the full force of the axiom, that a thing can not act where it is not, no more than it could be conceived to be capable of acting when it is not. Viewed in accordance with the axiomatic principles here set forth, the mind of the seer must have been present with the objects in paradise in order to perceive them, or else the things of paradise must have been, in order to be perceived, brought to the mind in images of thought as in dreams or visions. At that time neither physiology nor philosophy could furnish any facts or data upon which the apostle could rely in giving a positive answer to the question agitating the different schools of philosophy, and, not receiving any information upon this subject through inspiration, his negative reply to the question would fail to give full satisfaction to either the Platonists or the Aristotelians. But, adopting the course commonly pursued by the Agnostic, of neither affirming nor denying the speculations of either school, he left the question to be settled by the philosophers His only reply to the questions which then agitated the Greek mind in regard to the soul being absent from the body at any time during the life

of the individual, as in the instance just referred to, was, "God knoweth."

Without entering into the subject of the gradation of souls, as taught by Aristotle, it may be briefly said that he maintained that there was a nutritive or vegetable soul, which builds the body; an animal soul, upon which depends sensibility; and a rational soul, which possesses the power of reasoning. former, having relation to the living functions of the body, perish with the body. The latter alone, in man, was regarded as immortal. The first of these exists in vegetables. This, in connection with the second, belongs to the lower animals. The rational soul exists with the two former only in man. In the Aristotelian system of philosophy the powers of the personal human soul were trinal, and stood in direct causal relation to his anatomical structure, his physiological functions, and to his conscious or mental operations. And had his immediate followers taken one step in advance of their illustrious predecessor, and shown that what is known as the conscious or mental powers were, by an inveterate or irresistible law of thought, capable of setting up an action independently of the brain, as in nocturnal visions, and that it mattered not whether the thoughts of the mind pertained to things present or to things absent in space, whether they related to things of present or past time, whether to things in the heavens above us or in the earth beneath all could be externalized and represented to the senses of the soul in the subtile form and phenomena of a vision. With this class of facts once fully established (as would now seem to be the case), it would only require the seer to become en rapport with a celestial personage in order to witness the things that pertain to celestial vision; for, as heretofore set forth, unco-ordinated thought always gives unco-ordinated vision, while celestial or rapturous thought gives celestial or rapturous vision. Thus the question referred to by Paul-whether the soul was in the body or out of the body at the time of his vision-might have received a direct affirmative answer well-nigh two thousand years ago. Every man's experience proves to him beyond all reasonable doubt that the soul (mind) may, in ordinary nocturnal visions, represent, through the aid of the memory alone, facsimiles of objects either present or distant from the body, both in regard to time and space, without the soul quitting the body to be present with the objects pertaining to his vision. We say the objects pertaining to his vision; for, as heretofore shown, these objects are not physical, but of a spiritual nature. In vision the soul itself is endowed with capabilities and powers by which it may make all its mental objects now and here present to the complete realization of all its senses, as sight, hearing, tasting, feeling, etc. The fact is well known to every man that his own thoughts become embodied in objective scenery around the soul in ordinary nocturnal

visions. And so complete are all these operations and the ease with which they are carried on that we feel no effort of thought on our part, and hence, at the time, never suspect that the phenomena before us are not physical.

No doubt, as we have said, the Greeks at Corinth were familiar with the teachings of their own philosophers; hence Paul's allusion to the question whether he was in the body or out of the body at the time of the vision, and the direct bearing of this question upon the teachings of the two rival schools of philosophy, was evidently intended to allay any skepticism or contention that might arise in the minds of his Corinthian brethren in regard to the subject of his vision. must either view it in this light, or else regard the whole statement simply in the light of a rhetorical flourish, which would undoubtedly be a much more inconsistent view of the subject. In alluding to this vision, Paul gives us no intimation whatever of the things he saw or heard, except that he heard "unspeakable words, which it was not lawful for a man to utter." Paul's vision was by no means intended to be the final winding up of this form of inspiration. This special form of inspiration was left to be carried out upon a much grander scale in the closing scenes of the New Testament, as appears in the Apocalyptic vision, in which the grand scenery of another life is presented in phenomena of mind. We have thus bestowed a greater amount of attention upon the question alluded to by the apostle Paul in regard to whether the soul temporarily quits the body on such occasions, because of its like bearing upon other cases of the kind, and more especially on account of its applicability to the case of John's vision of the Apocalypse, to which we are now about to refer.

## CHAPTER V.

THE REIGN OF LAW IN THE WORLD OF THE SOUL, AS SHOWN IN THE APOCALYPTIC VISIONS.

AVING considered a few of the many instances L of dreams and visions related in the pages of Sacred Authority, we shall now proceed to notice the last of the New Testament writers on this subject. In the account which is there given we have a description of a remarkable series of strange phenomena, known as the Apocalyptic Visions. In the opening chapter of the book in which these visions are recorded, the writer informs us that his attention was suddenly attracted by a voice like unto the sound of a trumpet proceeding from behind him, and, turning to see the voice that spake with him, there stood before him a remarkable personage, appearing clothed with great authority and power. The hairs of his head were as white as the light, and his eyes as a flame of fire. Terrified at the sight, and completely overwhelmed with feelings of great fear, he fell down at the feet of the celestial visitor "as one dead." \* He was not dead, but in that state of entrancement which bears the similitude of death. The body was apparently insensible, while the

<sup>\*</sup>See New Translation.

soul (mind) was consciously employed in rapturous vision. We have heretofore shown the influence of sudden fright or fear in suspending or disturbing the operations of the vital forces of the body. That this sudden prostration of the body of the seer was the result of great fear will appear from what immediately followed: "And He laid his right hand upon me, saving unto me, Fear not. I am the first and the last. I am he that liveth and was dead, and behold, I am alive for evermore, and have the keys of hell and of death. Write the things which thou hast seen, and the things which are, and the things which shall be hereafter." In speaking upon the subject of these visions, we shall refer only to such passages of the text as may serve to illustrate the subject pertaining to the condition of the body at the time of the vision, the peculiar state of the mind of the seer, and the appearance of the scenic phenomena therein described. the account here given we have a similar condition of the body and mind of the seer to that which befell him at the Transfiguration. There was in each case an emotional feeling of great fear or dread of something about to happen him, which in both instances resulted in complete nerve-prostration, like that which commonly characterizes the entranced condition of the body. We have already alluded to the fact that the entranced state referred to by the great majority of sacred writers was attended with feelings of great fear arising in the mind of the person mentioned. It has

likewise been shown how the influence of strong emotional excitement, accompanied with feelings of fear, serve, in many instances of common life, to overcome the vital forces of the body so as to cause the individual to fall down entirely helpless and insensible. In regard to the state of the mind of the seer, the writer informs us that he was in the spirit; but we have shown in the case of Paul's entrancement that, to be in the spirit, it was not necessary that the soul should quit the body or be absent from it, but simply for its conscious powers to act separately from the brain and sense-organs of the body, as in sleep and dreaming. This question, however, has been sufficiently referred to in numerous other places.

We have elsewhere shown that in every vision the phenomena presented to view are hyperphysical and spiritual in their nature, and that the phenomena of a vision are orderly presented only when the thoughts arise in regular, logical sequence; for as are the thoughts, so are the phenomena of the vision. Our nocturnal visions are unco-ordinated and unique in character because the thoughts of the mind, upon which they depend, are such. In rational visions, the phenomena will appear orderly arranged on account of the orderly procedure of the thoughts. Where the dreamer or seer is placed en rapport with a celestial personage, there is an inspiration of thought attended with rapturous vision, like that of the case of Paul in the temple while in a state of entrancement. Sleep

opens to every man a door to what may be called the lowest plane of the spiritual, as in the case of our nocturnal visions, in which the scenery of the mind appears to every man alike; while the presence and directing influence of some celestial personage, inspiring a higher order of thought in the mind of the seer, opens a door to a still higher order of vision, known as rapturous vision. Thus the writer of the Apocalypse informs us that he saw a door open in heaven, and heard a voice saying, "Come up hither, and I will show the things which must be hereafter. And immediately I was in the spirit." In order for the seer to be in the spirit it was not, as above shown, necessary that the soul should quit its connection with the body, but simply for the conscious or mental powers to act independently of the brain and sense-organs of the body, while at the same time the unconscious, instinctive powers continue their accustomed operations in the maintenance of the living cell-functions; for without the continuance of the latter psychical forces, the seer would not have survived the vision either to write or describe orally the things of the Apocalypse. opening of a door, as above mentioned, was nothing more nor less than the elevation of the conscious powers of the seer to a higher order of ecstatic vision, from which point of observation there followed a description of the vision of the Apocalypse.

That the scenery described by the writer of the Apocalypse was that of a vision will appear from the

following: "And thus I saw the horses in the vision, and them that sat on them, having breastplates of fire and of jacinth and brimstone, and the heads of the horses were as the heads of lions, and out of their mouths issued fire and smoke and brimstone." \* remarkable incongruity of the phenomena here described is wholly without any parallel in the physical order of things. But not so in regard to the things of a vision, in which all the scenery therein contained is based on the well-known laws of thought. In this vision, the same as in every vision, the things presented to the seer appeared to him as veritable things. Thus: "Write the things which thou hast seen, and the things which are, and the things which shall be hereafter." What a significant form of expression, to apply the term things to the subtile objects of a vision! Every man knows, however, that in his nocturnal visions everything affects the inner senses with the same realization and distinctness that physical objects affect us through the outer senses of the body. Thus there are senses in the soul equivalent to those of the body.

The leading characters in this vision—the seer and the celestial personage with whom the seer was then en rapport—belonged to different periods of the world's history: the seer to the apostolic age; the other, representing an earlier age, declared himself to be one of the prophets. Both were of the human race. One was connected with the body; the other, disembodied. One

<sup>\*</sup>Rev., chap. ix, 17.

appeared as the leading actor on the stage of celestial vision; the other, only as an honored spectator of what was then taking place. In regard to the matter of experience, each had, to some extent, partaken in the higher order of rapturous vision. Thus the writer of the Apocalypse had, during a period of entrancement, witnessed the vision of the Transfiguration. No part of the scenery here described was of a physical nature, but simply the representation of physical phenomena. In this vision neither the seer nor the celestial personage treated the things presented simply as mere figments of the mind (as men generally declare vision to be), but as veritable things (phenomena) affecting the senses of the soul. Was it the sole purpose of this vision to present to the seer in symbolic characters of the mind the peculiar nature of that class of phenomena which pertain to the soul's future state of existence? Be this as it may, the phenomena presented were not of a material nature, but simply representative of the material presented in the form of a vision, in which everything-whether of the past, present, or future; whether absent, in time or space—appeared to the senses of the soul as now and there present. We all have a verification of this fact in dreaming, in which everything pertaining to our visionit matters not how strange or unique in its appearance—whether absent in time or space, whether it be regarded as either nocturnal (natural) or inspired, there is nothing within the comprehension of the mind

that can be claimed as impossible, or even difficult, for it to produce in such manner and form as the phenomena above referred to. And as all men are endowed with these powers of the mind, their exercise must point to some higher order and use than that displayed in the ordinary visions of the night. It was from the book of remembrance—transcripts of the memory—that Babylon, one of the world's former centers of commerce and trade, was brought up, and then made present in celestial vision, several centuries after the time of its destruction. Thus we see the human mind may, in the phenomena of vision, triumph over time and space by representing everything in spiritual form as now and here present to the soul's inner senses. There are two classes of phenomena: the one material, the other spiritual, or, rather, psycho-spiritual. Every thought that arises independently of the whether in sleep or trance, is attended by an accompanying phenomenon, which truly represents the thought with its phenomenal objects to the eve of the beholder, whether that thought or the thing thought of has relation to the legitimate business of one's life or the corruptions in which he may have been engaged. All are faithfully and most truly portrayed by the mind in the form of a vision. In accordance with this unvarying law, there can be nothing concealed or hidden in the inmost recesses of the mind that shall not be openly revealed to the individual.

All the phenomena pertaining to the Apocalyptic

vision may be ascribed to the celestial personage presented for the occasion, while the seer himself occupied the more subordinate position of a highly-honored spectator. Whenever any phenomena of a remarkable or highly-exciting character were to be presented to the seer, certain agencies were sometimes employed to attract and hold his attention to the scenes and things that were immediately to follow. For what other purpose can we ascribe the introduction of the four beasts, full of eyes before and behind, within and without, each having six wings, but simply to attract the attention of the seer by their remarkable appearance and personification of human speech? no doubt for this purpose that, at the opening of each seal, one of the four beasts would immediately proclaim with a loud voice, as if in tones of thunder, "Come and see." In what other sense can we ascribe the introduction of the seven vials but to attract the attention to the remarkable scenic phenomena that were about to follow? The same may be said in reference to the introduction of the seven trumpets which served to call the attention of the seer to the wonderful scenes that directly followed upon the sudden blast of each. Thus, as each trumpet sounded, it was immediately followed by a new and strange display of scenery, differing widely in appearance from the one that preceded it.

In the Apocalyptic vision, which may be regarded as the highest type of vision of which we have any account, there was a scenic representation of the earth,

with its vast oceans, islands, continents, mountains, and rivers, all presented in unstable array around the seer. In this, as indeed is characteristic of every known form of vision, everything presented to view was subject to rapid change, both in regard to the appearance of the objects and the places they occupied. Like the ever-changing and dissolving views of the camera, these phenomena were always presented in the most highly-attenuated shades of light and colors. Thus all the scenery described by the seer was presented under the subtile form of a vision, which, in all cases of vision, is couched in the same familiar colors of mind as those which every man witnesses in his dreams. In that remarkable display of scenery portrayed in the Apocalyptic vision, one scene would follow in the wake of another, appearing in quick succession, accordingly as the attention of the seer was attracted by the opening of a seal, the sounding of a trumpet, or the pouring out of the contents of a vial into the air, on the earth, or upon the waters of the sea.

At each given signal there instantly followed, as if by magic, scenes of the most extraordinary kind and character, accompanied by disturbances and commotions taking place upon the surface of the earth, in the sea, in the air, or in the stellar firmament. Everything witnessed in this display of scenery and subtile phenomena appeared to be undergoing more or less rapid transit from one place to another. Unlike the

stable things of earth, the mountains and islands represented in the vision fled away from their respective places and from the presence of the seer. The stars that emblazoned the canopy of the soul would, from time to time, disappear from view until finally everything representative of the things of earth, sea, or sky were rolled together as a scroll of parchment, as if to show the ease with which the destruction and reproduction of these things took place. So complete was the annihilation of these things that the very places which they had previously occupied could no longer be identi-Like the unstable morning dream, everything here portrayed, having served the purpose intended in illustrating the wonderful powers of the mind in relation to the laws and phenomena of thought and the purpose which these things were evidently intended to subserve in relation to the scenery of another life, having, I say, fulfilled their purpose, the entire content of the Apocalyptic vision fled away from the presence of the seer. Constant destruction and reproduction was the order of this vision, as indeed is the case with every other vision.

There are two conditions that served to distinguish this vision from that of the ordinary visions of the night; viz., the presence of a celestial personage, with whom the seer was en rapport, and the exercise of the will in connection with the other faculties of intelligence. It is evidently the temporary suspension of the exercise of this faculty that prevents our nocturnal

visions from proceeding in the same rational order of sequence as that which attends the waking state of the brain and senses. Why is it that the will generally fails, at such times, to act with the other faculties of intelligence in such a manner as to co-ordinate the thoughts, as in the waking state? This, as we have seen, depends, doubtless, upon the fact that in the waking state the objects of the external senses dwell or continue for a greater length of time than that which takes place in dreaming, which brings about a slower movement in the operations of the mind, thus giving the will, in the former case, an opportunity to engage in deliberative exercise. A very rapid movement of the thoughts is always incompatible with deliberative exercise of the mind. We have a noted example of this under the high emotional excitement of anger, in which the influence of this disturbance overruns and crowds out the deliberate action of the will over the thoughts. We can not regulate our thoughts so as to bring them into rational exercise in sudden outbursts of passion, as in the heat and hurry of rage. The voluntary faculty is then ready to act, as in other cases; but in these instances is crowded into temporary abevance on account of the extraordinary exercise of some one or more of the other faculties of the mind. But there is another influence which prevents the mind from engaging in logical exercise in dreaming; thus every thought is attended with an objective phenomenon corresponding with the subjective idea. In

dreaming, the objective scenery serves to divert the mental operations from one scene to another.

Accordingly, every concept of thought produces a change in the objective scenery; and the objective scenery carries the mind rapidly forward from scene to scene; hence the attention is constantly diverted from one object to another as rapidly as the thoughts and moments fly. Even in the Apocalyptic vision, where the will was acting with the other faculties of the mind, there was no time for any decided display of the powers of reasoning to be manifested by the seer, because the mind was rapidly carried along by the objective scenery of the vision, which was, no doubt, the product of the mind of the celestial personage who, through the objective scenery presented, held the thoughts of the seer to the panoramic phenomena before him. For like reasons there was little or no opportunity for the exercise of any of the other faculties beyond those of the perceptive powers and the emotional feelings of great wonder and amazement.

Notwithstanding the will acts but seldom in dreaming, we have nevertheless cited instances in which individuals experience slight glimpses of reasoning at those times, as in the case of students of mathematics (where the brain was greatly fatigued in attempting to solve some difficult problem), having fallen into a state of profound sleep, in which the mind, feeling less of the fatigue than the body, has continued the same chain of exercise as before, until the problem was solved. A

question of this kind could not have been solved except by a process of reasoning, in which the thoughts were so regulated as to apply the rules of arithmetic calculations, and thus daguerreotype, as it were, all the different parts of the problem in his nightly vision. That the will has the power of acting to a certain limited extent in dreams will appear from the fact of its starting up certain special trains of thought, as in the case of excursive dreams. Thus, when we determine to visit a friend or some city in our dreams, the determination to do so is an act of the will; but as each and every thought is attended with a corresponding phenomenon which appears to the sense; and as the objects of sense, at these times, act as a constant diversion to the mind, we are carried along from object to object and from scene to scene, until the whole course of the dream is often changed from the original purpose. this way the trains of thought, with the accompanying scenery, become erratic and irrational to a high degree. Where thought succeeds thought with great rapidity, we have a condition of mental action incompatible with deliberative or rational exercise.

Having thus shown the possibility of the occasional exercise of the will in directing the thoughts of the mind in ordinary dream or vision, let us now suppose that immediately after the close of the Apocalyptic vision the inspired writer had, on account of a feeling of great fatigue and depression of the nervous system, fallen into a state of profound sleep; and that the mind,

under the co-operation of the will power, passed into that rare state of vision and rational exercise of which we have just been speaking; the seer could, in that case, have produced in a dream another vision, in which would have appeared in regular duplicate form all the remarkable phenomena of the Apocalyptic vision. Thus, with the aid of the memory, and the will exerting a proper control over the thoughts of the mind, he could without difficulty have recovered in a regular, consecutive manner all the ideas and thoughts that entered into the inspired vision. This could have been accomplished without the aid of the celestial personage whose presence and dictation was so necessary to the production of the former vision. To think in sleep is to dream, and to dream is a spiritual process of the mind; hence with the will and the memory in exercise so as to carry on a course of consecutive reasoning, in which the same thoughts were linked together that inspired the Apocalyptic vision, all the scenery of that vision might have been readily reproduced from the beginning to its close. In this way, simply by a draft upon the memory, the inspired writer could have reproduced, while his brain was resting under the calming influence of sleep, a faithful transcript of all the scenes of the Apocalypse in a very much shorter period of time than was required by the mind to furnish it in written manuscript form. "What thou seest, write in a book." \* If at the close of this vision the mind could, from mem-

<sup>\*</sup> Rev., chap. i, 11.

ory alone, arrange the scenery of these visions in regular book form, it could, with the same mental powers in operation, reproduce the same scenery in a dream. With such an endowment of the mental powers as we see the mind is capable of accomplishing in the production of the phenomena of representative thought, there was nothing to prevent the seer, while the mind was acting under the directing influence of the will, from representing in a dream a true fac-simile of the great White Throne, with Him that sat upon it confronted by a sea of glass mingled with fire, together with the encircling rainbow, like that of the inspired vision. All these things, with the raining of fire and hail, accompanied by thunderings and lightnings and earthquakes, might have been as readily reproduced by the seer on the spiritual side of the mind, in all respects resembling the former vision. Everything that pertained to that vision might have been reproduced verbatim et seriatim, without any other aid than that which his own mind and memory were capable of furnishing. As in the inspired vision, so in regard to the uninspired, the phenomena presented to the seer would, at the time of its occurrence, have impressed the senses of his soul with all the distinctness and realization that material objects impress the mind through the sense-adjuncts of the body. The phenomena of an ordinary dream, then (with which all men are more or less familiar in their own nightly experience), are the same in kind and mental character as those which pertain to the dreams of sacred authority. Such phenomena, whether regarded as natural or inspired, never appear to the observation of any one, except when the mind is acting independently of the brain and its dependent sensorynerves, as in sleep or trance.

In that great and grand display of cosmical phenomena, mentioned in the Apocalyptic vision, and its sudden destruction, which from time to time was observed to take place, there was not the slightest shock or disturbance of any kind produced in the guiet order of external nature. While the sun, moon, and stars of this vision were constantly changing their places, or entirely disappearing, all the laws pertaining to material things, external to the body of the seer, continued to perform their accustomed round of operations, showing conclusively that the order and phenomena of each world were separate and distinct from the other. the one being material, the other psychical. While the body during sleep and entrancement was subject to the influence and operation of one class of laws, as the material, the conscious or mental powers of the soul were at the same time entirely under the controlling influence of another—the psycho-spiritual. The world in which his conscious powers were engaged was mental, and representative of the material—a world of mind only. Everything described in the inspired vision, whether referring to the past or the future, whether referring to Babylonian times and history, or whether relating to events that were to take place during the thousands of years to come,—all were represented objectively to the seer, under the highly-attenuated fabric of a vision. What, then, if the class of mental powers to which we here allude, and which have been so commonly looked upon by all men as being wholly unworthy of their attention and study, should prove to be the most important powers of the human mind in furnishing the highest and most direct proof that we possess in regard to the future existence of the soul after its separation from the body?

When we reflect that prior to the beginning of the present century the study of fossil remains, which pertain to the past ages of the world's history, was entirely neglected and misunderstood; and when we reflect that these scattered fragments have since been arranged into a universally accepted science pointing us to the immensity of the past, may not the broken and scattered fragments of thought that appear to all men in the wild confusion of their dreams serve, when brought under the co-ordinating influence of the will, to direct us onward into the interminable ages of the soul's future state of existence?

In dreams—in the ordinary visions of the night, the same as was the case in the Apocalyptic vision—the things relating to past time and to the past events of our life, always appear to the senses of the soul as being now and here present; present in our thoughts, present in the surrounding phenomenal appearances, present in all the realization of sensations and perceptions,

present in all our emotional feelings; in short, the objective scenery is at these times, to the apprehension of sense, as fully realized as are the physical appearances in the waking state of the brain. In every vision, whether we view it as natural or inspired, the thoughts of the mind are all externalized in phenomenal appearances around the soul, resembling those which pertain to our physical sense-perceptions. Viewed, then, in the light of these natural laws and powers of the soul, which are so constantly pressed upon our attention on the night-side of the mind, there would seem to be a twofold purpose running throughout the entire course of the Apocalyptic vision, one having reference to certain prophetic announcements of the world's future history and events; the other, and perhaps the more important of the two, directing the attention of man to the peculiar nature and character of the objective phenomena pertaining to another life—the life of the soul after the brain and physical senses have been destroyed.

There is a prevailing opinion among men that we have no direct proof of the immortality of the soul aside from the teachings of Revelation. This wide-spread notion arises, no doubt, from the fact of our not following closely in the footsteps of nature upon this subject. It is commonly maintained that the Creator has for some purpose or other withheld all testimony touching the natural immortality of the soul from human observation. This is, we believe, a mistaken view

of the case. It does not seem probable that He would purposely conceal the evidences of such in nature, and at the same time strive to bring to view the same concealed facts in Revelation. We hold that no less pains have been taken to convince men of the true scientific facts regarding the immortality of the soul than have been taken to convince us of any facts pertaining to the different branches of the natural sciences. Properly to understand any of these branches, we must study them in the true course that nature has marked out for us to pursue. Any wide departure from this will always result in more or less failure. If we would study the nature of light and colors, we must search for this class of facts in the luminous ether; and so of chemistry or astronomy, we must look for the facts pertaining to the former among the chemical elements, and those of the latter among the stars that shine in the celestial firmament. If we wish to acquire knowledge in regard to the true nature and properties of sound, we must search for this class of facts in the study of atmospheric phenomena. If we wish to obtain information in regard to the natural immortality of the soul, we must study the phenomena and laws of the soul in the line that nature has pointed out to us. Every attempt to prove the immortality of the soul from the study of its operations in connection with the organs of the body has been a signal failure. To show the capability of the soul to act independently of the material body, we must study that class of our mental powers which act inde-

pendently of the organs, as in sleep and dreaming. In regard to the illogical course pursued by men in reference to this class of facts, the problem may be briefly stated thus: Given the operations of the mind in connection with the bodily organs—the brain and senses to prove its capability of acting independently of organs, men have in all ages shrunk from the task of attempting to analyze the dream-phenomenon, so as to bring these operations from their maze of entanglement and seeming chaos into a system of well-regulated science, in which order is brought out of confusion and dis-The whole subject has been either entirely ignored or looked upon as wholly inexplicable. And hence every one that has attempted to deal with the subject of dreaming with any degree of seriousness or scientific inquiry, has been looked upon either as an enthusiast or a visionist. Is the Creator, then, who formed the soul and endowed it with this class of powers, a visionist, because of his repeatedly calling them into requisition and special use in presenting them to the attention of the inspired penman or seer?

There are two purposes to which the mental powers we have been considering may apply; viz., the one to exemplify the nature and character of thought in the study of the mental operations of the waking state, and the other to point us to the ultimate independence and final triumph of the soul over the physical body and the physical world, as exemplified in the dream state. In the investigation of the latter class of our

mental powers, we find that there is no thought arising in the human mind without a corresponding objective phenomenon appearing in exemplification of its true nature and character. And as the soul can carry on these operations independently of the nervous system and its sense-organs, so it would seem fully equipped with everything necessary for its survival after death of the body for carrying on the operations of thought, together with the power of producing corresponding objective phenomena on and on forever, while God, the mind, and thought endure.

## CHAPTER VI.

## ON THE RESURRECTION OF THE DEAD. AND WHAT IS THE PART RAISED?

THE subject of a resurrection from the dead is one that has more or less engaged the attention of every man from the earliest times of which we have any account to the present. The immortality of the soul is a question which has engaged the earnest attention of some of the most renowned philosophers of antiquity, as was the case in regard to Socrates, Plato, and Aristotle, whose writings have been handed down to us from a period of nearly four hundred years prior to the Christian Era. In regard to the last two named more especially, their writings upon this subject are still read and much admired. Each of these philosophers argued the question from a different standpoint, giving rise to the foundation of two opposite opinions which engage the earnest attention of the two great rival schools of philosophy, the Platonists and Aristotelians. Plato held that the soul was pre-existent; that it is and ever was immortal, and indestructible in its nature. He maintains that in its anterior states of existence it had accurate and innate conceptions of the "eternal truth." He held that the soul traveled in its celestial rounds until

at last, descending to the earth, it found a suitable organism as a lodgment in which to take up an abode.

On the other hand, Aristotle, a pupil of Plato, maintained that the soul built the body; that it is, in fact, the vital principle existing in each and every part, and hence is in the same form as that of the body. He also taught that the soul, in its entirety, is the true Artificer of the body, and that there is a vegetable soul giving life and form to the plant, as well as an animal soul, giving life and form to the animal organism. He also maintained that there are three souls, differing from each other in regard to the office each performs—one answering to the vegetable is called the nutritive soul. which constructs the organism of plants, as well as a higher, animal soul, which gives rise to sense and intellect, both in man and in the lower animals. The animal soul exists in connection with the former in man and in animals; while in regard to man alone there is still a higher or rational soul, which is superadded to the two former, and is that part which is immortal. In man the two former perish with the body; while the rational soul, being spiritual in its nature, is not subject to death, and hence survives the destruction of the physical body. He likewise taught that, as the animal soul is the vital principle of the body, vitalizing the different parts, it is in the personal form of the body; it dwells in each and every part of the animal organism. So, in regard to the vegetable soul, there is in the seed of every plant, like that of the germ of the animal, a germinal or quickening principle that reproduces its kind in form and fruit like that of the parent stalk, from which it originated, thus perpetuating the different species of the vegetable kingdom in form and character from age to age.

Following close in the wake of the teachings of the two rival schools of Greek philosophy, the Platonists and the Aristotelians, the next most noted writer we have on the subject of immortality and a resurrection from the dead is the Apostle Paul, who may be, not inaptly, styled in this respect the Christian philosopher. (The words immortality and resurrection are not to be found among the Old Testament writings.) Disputations having arisen among the members of the Greek Church at Corinth, the Apostle Paul, in order to quiet certain schisms and heresies that had arisen among them in regard to the possibility of a future existence of the soul and a resurrection of the dead, wrote the fifteenth chapter of First Corinthians, in which he treats this subject from different standpoints. In regard to the first question propounded, "How say some among you that there is no resurrection of the dead?" he first considers this question from a theological standpoint based upon the resurrection of Christ, to show its possibility and plausibility from Scriptural grounds purely, and then proceeds to the following question: "But some one will say, How are the dead raised? and with what manner of body do they come?" \* In reply to this, he

<sup>\*</sup>We here quote from the New Version.

says: "Thou foolish one, that which thou thyself sowest is not quickened except it die: and that which thou sowest, thou sowest not the body that shall be, but a bare grain, it may chance of wheat, or of some other kind; but God giveth it a body even as it pleased him, and to each seed a body of its own. All flesh is not the same flesh; but there is one flesh of men, and another flesh of beasts, and another flesh of birds, and another of fishes."

But in reply to the question, How are the dead raised? and with what kind of body do they come? the Apostle Paul, as if to remind the members of the Grecian Church at Corinth of the teachings of their own philosophers, says: "Thou foolish one, that which thou thyself sowest" (referring to the seed of the plant) "is not quickened except it die." Thus another plant similar to the one from which the seed originated can not be formed without a vital process, which must commence in the germ-cell contained in the seed sown; and this renewal or germination of a new plant can not take place until after the seed dies, or at least takes a certain step toward decay; so neither can the resurrection take place until the body dies, for the soul never quits the body during life, according to the saying current among the Aristotelians of that day, "The body without the soul is dead." Thus the following indorsement and declaration by St. James: "As the body without the spirit is dead, so faith without works is dead also." "And that which thou sowest, thou sowest not the body that shall be, but a bare grain, it may chance of wheat, or of some other kind; but God giveth it a body even as it pleased him, and to each seed a body of its own."

But before attempting to trace the vital process by which the soul and body are formed in vital connection with each other, let us follow the apostle still another step further in his discussion of the subject of the resurrection from a vital standpoint. In summarizing, Paul comes unmistakably to the following conclusions: First, "there is a natural body, and there is a spiritual body;" and to settle this question beyond a doubt in regard to which of these will be raised, he declares in the same connection, "that flesh and blood can not enter the kingdom of God." The kingdom here referred to must doubtless have been the same as that which is afterwards mentioned by St. John in the Apocalyptic vision, where the resurrected countless millions had already entered after the death of their physical or natural bodies. "That which thou sowest, thou sowest not that body that shall be, but bare grain." The body that is raised is not the physical body, but the spiritual; for "there is a natural body, and there is a spiritual body." The physical body may be traced after death directly back in all cases to the inorganic kingdom as it was; while the spiritual body can not be thus traced, but surviving the physical, returns unto God, who gave it. Prior to the time of the fecundation of the germ-cell, neither the soul nor the body existed in personal form, neither separately nor jointly.

The Apostle Paul, who was himself a Greek scholar, and no doubt fully conversant with the teachings of the Greek philosophers, pursued a similar line of inquiry in regard to the subject of a resurrection, taking the seed of the plant as a familiar example from which to illustrate this subject. Thus he pursues the argument on the vegetable side of the question, instead of that of the animal side, as being the one most familiar to and probably most readily understood by the members of the Grecian Church, to whom he was then writing in regard to the teachings of their own philosophers.

After considering the subject of a general resurrection from a theological standpoint, he takes up the question from a vital or spiritual standpoint, arguing from the germination of the seed of the plant. At the time of the apostles, the words life and soul were often used synonymously. Hence Paul's illustration of the resurrection from the seed of the plant by showing that within the seed there is a germ-cell which contains a vitalizing principle that survives the destruction of the seed. The seed must die in order that the renewal of life can take place from the germ-cell of the seed. the human body must die before the living soul, which as a vitalizing principle is connected with every cell of the body, can be resurrected from the body to enter upon a separate, spiritual life. At the time of the apostles, Aristotle had so impressed his teachings upon the Greek language and literature of that day, that the words soul and life had become synonymous terms.

true is this, that even at the present time his teaching on the subject of the relation of the soul to life and to the body is still regarded as a truism. Thus the saying, "The body without the soul is dead," is still a generally recognized fact. We are told by commentators that in the Scriptures—both in the Hebrew and in the Greek the same word is often used for animal life and also to signify the immortal soul. Without entering into a minute detail in reference to the origin of either the body or the soul, Paul says, "There is a natural body, and there is a spiritual body;" and then affirms, in regard to the soul, "God giveth it a body even as it pleased him, and to each seed a body of its own." And so he might have said, with equal propriety, in regard to the physical body, which is the vitalized tenement of the indwelling soul, "God giveth it [the soul] a body as it pleased him;" thus keeping up the distinction between the soul and the body, but ignoring the question of how either the physical body or the soul is formed. He might have said, God gives to each a body as it pleased him; thus leaving the whole question in regard to the formation of both the soul and the physical body in the hands of the scientists, to be settled by them. As the science of astronomy can be settled only by the aid of the telescope, not only in regard to its physical elements, which are being discovered by the use of the spectroscope, but also in regard to the play of their imponderable agents; so, also, in regard to the cells or minute anatomical elements of the body. These require the use of the compound microscope in order to determine the nature of the vitalizing principle—the soul—with which the cells had been connected during the process of their formation. In proof of the current teachings that the soul was held to be the vitalizing principle of the body at the time of the apostles, we have already given a direct quotation to this effect from the writings of St. James: "For as the body without the *spirit* is dead, so faith without works is dead also;" \* thus showing the current teachings of Aristotle at the time of the apostles, that the body depends upon the soul as its true animating principle.

## "God giveth it a body as it pleased him."

Paul, recognizing the fact that the soul and the body existed in connection with each other—developing together from a germ-cell in the seed of the plant—did not regard the soul as being of such high order as to place it beyond the reach of legitimate inquiry; but under the simile of the seed he referred its origin to a living principle contained in the seed of the plant. In this he seems to indorse the Aristotelic idea that there is a vegetable soul as well as an animal soul concerned in the growth and development of both plants and animals by means of the principle of life. According to the theory of life held at that time, the soul was regarded as the true, living principle of the body.

<sup>\*</sup>St. James ii, 26.

It was then held that the origin of the spiritual soul was identical with the principle of life, existing in the natural or physical body. In regard to the immortality of the soul, he made a distinction as between man and the lower animals, designating them as belonging to the higher and the lower—to bodies celestial and bodies terrestrial. Thus God giveth it [the soull a body even as it pleased him, and to each seed a body of its own. All flesh is not the same flesh: but there is one flesh of man, and another flesh of beasts, and another flesh of birds, and another of fishes. The celestial, therefore, distinguishes between the rational and the irrational—between man and beasts. The latter, incapable of reasoning, can not rise to rational intelligence, without which they can not attain to the high order of a boundless immortality. did not follow the subject of the formation of the soul farther than simply to refer it to the principle of life from which both the body and the soul are developed by means of a vital principle connecting them together during the life of the body. means were then in use for facilitating the study of anatomy as a science in that day is not certainly now It is thought, however, by some that Aristotle must have been familiar with the use of the compound microscope\* in order to have reached the correctness and proficiency that he did in regard to the structure of animals and their comparative physiology

<sup>\*</sup>See Dr. Tyson on the "Cell Doctrine," pp. 1, 2.

with that of man, as well as to their distinguishing mental capacities. Aristotle's views of the human mind are generally accepted as being remarkably accurate, even by the most erudite of the philosophers of the present day. The Apostle Paul made no attempt to give an outline of either anatomy or physiology. He might have referred to the physical body as a tenement for the soul to occupy and make use of during life, and say God gave it a body as it pleased him, with as much propriety as to apply it to the resurrected body of the soul; but he doubtless understood the perplexing questions which were then agitating the members of the Church at Corinth, in regard to which he makes mention to their shame; for some of them denied a resurrection, possibly by reckoning man in the same category with that of the lower animals.

Let us now pass from the seed or egg of the plant to that of the animal, and briefly trace the connection existing between the soul and the body. Psychology is now an admitted science. Beginning in the maternal germ-cell, the soul and the body develop together from this cell by means of a vital connection existing between them. The soul serves, at the same time, as the vitalizing force and also as the superintending artificer of the body in each and in all its parts. Thus the body is formed in every respect to suit and serve the soul as a living tenement and as an instrumentality during their connection with each other. As heretofore stated, all animal life, as well as vegetable life,

begins [ab ovo] from an egg or germ-cell. The germcells of the animal kingdom exist in countless millions, from which no animal organism can be formed until after the process of fecundation has taken place, which requires the union of the paternal germ-cell [spermatozoon] with that of the maternal germ-cell. Thus the spermatozoa of the paternal cell must form a union with the maternal ovule-cell before an organism can be formed from this cell. Something must be added to the maternal cell in order to construct an organism. What, then, is this principle—this something—which is added to the maternal ovule by which the organism is formed from this primary cell? First we may safely say what it is not. It is not electricity; for electricity does not usually behave in this manner. It never assumes permanent characteristics of sensation and thought. Neither is it animal heat; for this already exists in the cell prior to fecundation. Nor is it life. The principle of life exists in the cell before the fecundating process took place. This will appear evident from the well-known fact that a dead cell can not be fecundated. There is, then, but one other universallyacknowledged principle among the imponderables that can be added to the germ-cell by this process, leaving out of view the material molecules of which each and every cell is composed; and that principle is the psychical, in which sensation and perception arise, and from which mind is ultimately developed. That it is the psychical principle that is added at this time is evident from the fact that the mental qualities or powers manifest, more or less, in every case the peculiar mental characteristics of both parents blended in the offspring. This blending of the mental characteristics in the offspring shows itself whenever and wherever any striking mental peculiarity is found to exist in one or both parents. In some instances these striking peculiarities are partially concealed by the blending of opposite mental qualities of the parents transmitted to the offspring. This blending of the mental powers of both parents in the progeny is both radical and complete, continuing in the offspring during the life of the individual, be it man or animal. Thus, true to this law, the lion transmits to his progeny his own mental and ferocious disposition; and so of every other species of the animal kingdom. The lion, for example, never transmits to his progeny the mild or mental nature and disposition of the lamb. Neither does the eagle transmit to its offspring the disposition nor bodily form of either the lion or the lamb; and so in regard to man, each transmits to the progeny the separate power of building up an organism suited to the mental manifestation and wants of the indwelling psychical artificer that constructs it. It is only for the use of the psychical that an animal or physical organism is ever formed. Thus we see in the one case transmitted the teeth to suit the ferocious disposition of the lion; in the other the claws, beak, feathers, and wings of the eagle; each being suited in structure, in every case, to its own wants as an animal. And, lastly, we have the hands of man as best suited to his mental requirements in serving the indwelling soul. So no species is found to change structure or mental powers with another. Each is always formed suited to his kind, mentally and physically, from generation to generation throughout the ages.

Each parent transmits to his offspring that, and only that, which he himself possesses, whether this be mental or physical. Therefore each paternal germ contains within it, when blended together with its counterpart in the maternal ovule-cell, all that which is necessary to build up from this initial cell the organism of the offspring. Thus each germ-cell contains within it an impersonal psychical principle, which, when blended with its impersonal counterpart contained in the maternal cell, serves as an artificer in building up an organism similar to that of the parents. By means of the union of these germinal psychical principles, which takes place in the maternal germ-cell, the personal soul is formed. Each germ-cell of the parents contains within it a complete psychical counterpart of the opposite sex; but no germ-cell can ever form an organism until after the fecundating union of the two has taken place. When examined by the microscope, these cells possess, prior to the fecundating process, an amœboid movement—they expand and contract alternately. These movements are owing to an impersonal principle of life existing in the cell; but this principle alone lacks the power of dividing the cell, which is the first step

to be taken towards the formation of an organic structure.

After the fecundating union has taken place, the first change noticeable occurring in the maternal ovule is an enlargement caused by the absorption of nutrient The next step taken is the division of the impregnated ovule into two cells. Each of the daughter cells thus formed contains within it the same organizing principle which is transmitted to the first or germcell. This principle we have denominated the psychical. The impersonal psychical principles, when uniting together to form the personal soul, form at the same time an indissoluble union with the vital principle contained in the germ-cell at fecundation. The personal soul thus formed by a union of the impersonal psychical elements in the germ-cell, and by uniting also with the vital principle [known and designated as the anima mundi], extends by division of the first or germ-cell from cell to cell. So the two daughter cells contain both the psychical and the vital principle contained in the first before dividing. Neither the psychical alone, nor the vital alone, can multiply cells by division. Hence the personal artificer concerned in the formation of the organism is psycho-vital, and this union of the psychical with the vital, as we expect presently to show, is indissoluble, and will continue throughout the duration of the soul itself. As heretofore stated, the body extends by an evolutionary movement of the personal psychical principle (which vitalizes the organism) from cell to cell until millions of cells, of which the body is composed, are formed. We have divided the psychical powers into two fundamental classes—viz., the unconscious, instinctive, which, beginning its initial operations soon after fecundation has taken place, constructs the organism, differentiating the structure into all its parts; and the mental or conscious powers, which make use of the organism as an instrumentality after the birth of the individual has taken place.

That the soul possesses differentiating powers is shown in the differentiation of its powers or faculties of intelligence. The unconscious instinctive powers, as a class, are witnessed and known by their differentiating the general form and structure of the body, as well as in the special functions of the different parts, and also in its adaptation to the different sense-perceptions, memory, will, etc. Thus the soul, in each case, instinctively builds the body for its own use. Both the soul and the body are developed together, each into personal form for the first time in the innumerable ages. As the cells extend in number and are co-ordinated into bodily form and structure, the soul extends in due personal form, pari passu with the form of the body. The blood of the mother possesses the principle of life. It has been shown elsewhere that the blood is alive, having received the living principle from the vegetable, which is, directly or indirectly, the food of the animal. The vegetable kingdom receives the principle of life directly from the sun's rays during its

growth, and enters the body in each and every part through the circulation of the blood, thus supplying both body and soul with their requisite elements as they develop in form and in function from the germ-cell down to the close of life.

As the differentiated nerve-current runs down (whether this takes place suddenly by accident, or slowly by disease), as the nutritive powers diminish or entirely run down in the cells at the cessation of the nerve-current, the death of the whole body ensues. And the body without the vitalizing soul is dead. The body we may follow in the course of its decomposition to the inorganic kingdom of nature, from which it originally came. But what of the soul? This we can follow only by tracing its capabilities and powers of acting without the aid of bodily organs through which it had been instructed when acting in connection with the body and world in the waking state. It can no longer depend upon the decayed body for the support of its conscious operations; it can no longer depend upon the world for any of its sensations. It has been shown that in dreaming it performs all these several powers when the body is asleep. We all know by our own experience that it can think and feel and act under emotional feelings of excitement, while the functions of the brain and sense-organs are suspended in sleep when the physical world is not acting upon them when all the phenomena around us are changed and entirely dependent upon the thoughts of the mind.

We know that in dreaming the mind can think without the use of the brain; that it can see without the aid of the physical eye, as in cases of complete blindness from amaurosis occurring at adult age; that it can hear without the physical ear; and feel, in the dream state, on both sides of the body alike, without the aid of the nerves of sensation, as in the cases of hemiplegia. We have seen that at such times all the phenomena that surround us depend upon the thoughts of the mind, and hence change with every change of thought, as these come and go. We have seen, at these times, that the soul is in the same personal form as the body. If we examine the body soon after death, we shall find the following subtile principles, upon which life had depended, are all absent: First, all thought and bodily motion have ceased; second, the formation or production of heat has ceased, and entirely disappears by means of the well-known law of radiation. If we examine the cells by the microscope, we shall find that all the cells have lost their vitality; for all amœboid movement has then ceased. It was shown, when treating upon the germ-cell, that, prior to fecundation, this cell had a visible amœboid movement, which depended solely upon the impersonal life of the cell. What, then, has become of the vital principle—the anima mundi that principle which is taken up by the vegetable kingdom from the sun's rays in the process of the nutritive action of the plant, upon which action we depend for the food that supplies the blood necessary to the support of the body and personal soul in carrying on the functions of animal life? When considering the subject of the fecundation of the germ-cell, it was then shown that the impersonal psychical principles, both paternal and maternal, which entered into the formation of the personal soul, enters also, at the same time, into an indissoluble union with the vital principle contained in the germ-cell. This inseparable union of the imponderable soul with the imponderable vital agent contained in each cell of the body continues on and on forever during the existence of the soul. At the death of the body, the soul, being then clad only with life which it had taken from the organism and from the world, is now surrounded only by the circumambient ether upon which it had formerly depended for all the sense-phenomena of light and colors, while in connection with the body. It is still dependent upon the same or like vibratory movements of the ethereal environment in. the production of light and colors after death as before, depending likewise upon it for all other sense-phenomena after dropping the physical. The vibrations of the ether now depend upon the thoughts of the mind exclusively instead of upon physical causes, as before the death of the bodily senses. After death the senses of the soul depend entirely upon the action of our thoughts, which give rise to like sense-phenomena, as the thoughts themselves had formerly depended upon for their production during the connection of the mind with the senses of the body. As in the former case,

all sensation and thought depended upon vibrations of ether, so in regard to the latter (except the order is reversed) all vibrations of the ether resulting in sensephenomena depend upon the mental action of thought the same as that which takes place during the dream The soul, then, having quit its connection with the body, the latter, having become deserted by the tenant, is now tenantless forever. The personal soul, being then supplied with a spiritual body, continues forever. When we look upon the cold form of the tenantless body, the soul that had occupied it and used it as an instrumentality during life can make no longer use of it, but, not having lost any of its own special sense-powers, it has simply changed from the physical to the psychical or spiritual order of sensephenomena, the nature and character of which all men have witnessed some time or other in the unco-ordinated phenomena of the dream state, when the brain and nerves of sense were not contributing to the mental action. While in connection with the physical body, the soul is equipped for a life in the physical world; and so, when permanently separated from the bodily senses, it is equally equipped with powers of sense for an endless existence in the spiritual. But let us here stop for a moment in order to see whether death produces any deleterious effect upon the action of the intellectual powers, whether these powers fare as well in this final struggle as those of the sense-powers.

We shall now pass to a brief consideration in regard

to the effect produced upon the intellectual faculties and powers at the time of the dying moments. We have said that the soul, when separated from the countless millions of cells with which it had been connected during the growth of the body, carries the vital principle with it, leaving only a small amount of vitality remaining with the molecules of the cells. Seeing that the soul can act without the aid of the nervous system in regard to its sense-powers in connection with the environing ether after the death of the nervous system, we now pass to notice the effect of the final separation of the soul from the bodily structure at death. In regard to the conscious class it has been stated that in death the soul loses none of its powers. It is a wellknown fact, however, that during the last moments of life the conscious powers of the soul pass into a state of complete unconsciousness, the effect of which is to suspend, at the time, the mental operations, including all sensibility to pain. There is no pain during a state of unconsciousness in death. We have a similar state of unconsciousness which hangs like a cloud over the intellect of the drowning man until after he shows signs of returning consciousness, which is then commonly attended with marked feelings of distress. If, upon recovery from this condition, inquiry is made in regard to his mental state, he will inform us that during the time of his unconsciousness he had no knowledge whatever of an existence, either present or past, nor expectancy or hope in regard to the future. All was a blank.

We produce a temporary state of unconsciousness by the administration of ether and chloroform for the purpose of warding off pain during surgical operations. So in cases of epileptic convulsions, the writhings of which present to the bystander the appearance of great suffering. But upon making inquiry after the paroxysm is passed and where the unconsciousness had been complete, the epileptic will inform us that he experienced no suffering or pain during the time of the paroxysm. The feeling or knowledge of pain pertains exclusively to the conscious operations of the soul, the operations of which did not begin until after the formation of the organic structure had been completed—not till after the birth of the individual had taken place. The conscious powers could not carry on the functions of organic life for a single moment, nor can the functions of the unconscious instinctive powers take the place of the conscious operations. Unconsciousness, then, is not death; for we have seen consciousness return time and time again, without the slightest impairment of the mental powers; and if unconsciousness is not death, what would constitute the death of the soul? It could not certainly take place on account of the cessation of the unconscious instinctive class of the psychical operations, which act in connection with the nerves of celllife; for these powers are never conscious. Nor could the death of the soul arise on account of the disconnection between the action of the conscious powers and the functions of the cerebro-spinal system of merves;

for we have all witnessed these mental operations taking place thousands of times when dreaming during the sleep of this class of nerves. Unconsciousness, then, does not destroy the soul prior to the death of the body. It is simply nature's anæsthesia-God's mode of suspending pain in the dying man. As above stated, when witnessing the convulsive struggles of the epileptic, there is presented to us the appearance of great suffering; but upon questioning him soon after the return from his unconscious condition in regard to his suffering pain at the time of the convulsive paroxysm, he will then inform us that he had no knowledge whatever of what occurred during the time of his convulsion. So when we stand by the bedside of the dying, and witness the convulsive struggles which sometimes occur during the state of unconsciousness, we may feel assured that there is no pain experienced in the final struggle of the dying man. In all cases of recovery from a state of complete unconsciousness we see that the effect of unconsciousness is only temporary. It has been shown that where amputations of the limbs of the physical body had taken place, there is no corresponding dismemberment in regard to the limbs of the personal soul observed in such cases during the states of dreaming, when the soul, and not the body, is presented to his view. If the soul, then, can not be mutilated nor be destroyed by unconsciousness, what else could we conceive would destroy it?

Man may be regarded as a personal, spiritual being,

with a physical body annexed. When the personal soul is separated from the physical body, it takes the vital principle with it. "God giveth it a body even as it pleased him." The question propounded by the doubting members of the Church at Corinth was not, whether the soul had a body, but, "How are the dead raised, and with what manner of body do they come?" Paul reaches the answer to the question by declaring that "there is a natural body and there is a spiritual body." We have attempted to show how the latter was connected with the physical body cell by cell during its formation and development. Prior to this connection, neither the soul nor the body existed in personal form. The physical body is chemical, ponderable, and at death is subject to change of decomposition; while the personal, imponderable soul, not being composed of chemical elements, is not subject to chemical change or decomposition. The body is, therefore, perishable; the soul is imperishable. The body of itself is insensible; the soul alone is sentient. All sensation, all thought, all emotional feeling, memory, and will pertain entirely to the sentient personal soul. In the waking condition the soul is acted upon by the phenomena matter in the production of thought. dreaming the personal soul is self-active. duces its own objective phenomena by means of the operation of thought acting upon the environing ether which vibrates upon the senses of the soul somewhat similar to that which takes place by vibratory movements upon the bodily senses. There are two distinct classes of phenomena: one physical, the other psychical. Both classes are alternately perceived by us, as when we wake and when we sleep. The fact of the existence of each class rests alike upon the same authority; viz., the authority of our percipient consciousness.

The imponderable personal soul, in separating from the body, takes, as we have said, the vital principle of the cells with it, with which, as a vital link, it was connected while in the body. It now leaves the latter solely to gravitation and to inorganic chemical action. In dropping its connection with the physical body and the physical world, the soul is then acted upon solely by the wave-movements of the universal environing ether, with which it had always been surrounded while in the body, and with the wave-movements of which it had also been directly subject in the production of the visual sense-phenomena of light and colors when acting in connection with the subtile toning agent of the optic nerves. This all-pervading ethereal environment, being universal in its nature, exists everywhere throughout all space, and, like an atmospheric envelope, surrounds the personal soul at all times, thus contributing to the production of sense-phenomena by vibratory or wave-movements set up after the death of the body by the thoughts of the mind, the same as we have already shown takes place in dreaming.

The vital principle, having united with the personal soul cell by cell during the growth of the body, now

suddenly quitting its connection with the countless millions of cells, becomes united with the soul more completely and more firmly than before their separation, and thus furnishes its just quota to the resurrected body which it has taken from the world; while at the same time the physical body becomes, soon after, inelastic and shrunken in size in consequence of the principle of life having suddenly deserted the cells, upon which principle, in combination with the psychical, the cells had depended for their formation and growth. The body now continues to be subject to gravitation the same as before, while the personal, imponderable soul then becomes directly subject only to polarity; for there is a gravitating center, and there is a polar center. The former pertains to the chemical or ponderable, the latter to the imponderable—such as the psychical, heat, light, electricity, and magnetism.

The soul, then, holding its relation to the physical world by its connection with the physical body, now drops its connection with the body and the world, and, being fully equipped with all the requisite powers of sense for a separate existence from that of the body, it continues on and on forever in a new and separate course of endless vision, while God, thought, and the environing ether endure. If the soul can think and act without the functional aid of the brain; if it can see without the functional aid of the physical eye, and hear without the functional aid of the nerves of hearing, as has been abundantly shown in dreaming, it can think

and see and hear and feel and perform all other acts of sense after the brain and the physical senses are destroyed; while the psychical phenomena continue to be carried on uninterruptedly in an endless course of rational vision forever.

In conclusion: There are two separate sources of information upon which men have chiefly relied in regard to the immortality of the soul; viz., revelation and the nature and powers of the soul itself. If the science of geology has been dependent upon a careful collection of the facts upon which this science rests; if the science of astronomy depends upon a careful investigation of the heavenly bodies that are floating in space; if the science of chemistry depends upon a diligent study of the nature and laws of the chemical elements: if the science of optics depends upon a careful study of the nature and properties of light; if the science of the electric agent depends for its further advancement upon a careful study of the nature of its intricate laws and their application to useful mechanical devices -if all these, and many other branches of science that might be mentioned, required close and careful investigation, how much more important is the study of psychology in regard to the true nature and laws of the human soul in reference to the facts which underlie its future existence when separated from the physical Now, if in all these different branches of science nothing has been hidden or purposely concealed from careful observation, how important is the study

of the powers of the human soul in reference to its present and future state of existence! Not only is the study of psychology important in connection with the organs of the body, but it becomes equally or more important to us to investigate such laws as may be found capable of acting separately from the brain and sense-organs of the body. If the soul is able to maintain a personal existence after the body has been destroyed, it must be on account of a certain class of powers by which it is abundantly capable of acting independently of the brain and nerves of sense. If no such laws can be found, it is safe to say that the soul is not thus endowed by nature with an immortal existence. But, on the contrary, if the personal soul contains within it such laws, as have been heretofore abundantly shown in these pages, they are legitimate objects of scientific inquiry in regard to investigation and discovery. We can scarcely suppose that there are laws pertaining to any of the sciences that are purposely kept hidden or concealed by the Creator from careful observation—not even those of the Roentgen rays of light—much less those of the human soul. the science of geology, which is a child of the present century, was neglected and entirely overlooked during the past centuries, it was owing to an inexcusable neglect in reference to scientific investigation. As the study of this science has served to open up the past history of the animal races during the millions of years preceding the existence of the human race, may not a like careful investigation of the nature and powers of the human soul enable us to reach beyond the present boundaries of time, by which we may be enabled to go forward in our investigations millions of years to come in regard to the future existence and operations of the soul? More especially is this result to be expected when we consider the human soul as the great personal, conscious, spiritual counterpart of the physical, comprising also, as it does, not only the study of its own laws and being, but likewise the study of those laws which pertain to all the physical sciences. With the foregoing facts fully established, we must regard the soul as endowed with all the requisites of an endless existence, both in regard to its indestructible nature and its well-known cosmical powers pertaining to the spiritual reproduction of all the varied phenomena of the physical world during such times as when the functions of the brain and special sense-nerves are temporarily suspended under the tranquillizing influence of periodic normal sleep.

From these facts, which are presented to the experience of every man during sleep and dreaming, it is conclusively shown that the soul is endowed with endless powers of existence which can not be gainsaid or set aside by any valid argumentation, thus answering the question propounded nearly two thousand years ago by the doubting members of the Church at Corinth, "How are the dead raised, and with what manner of body do they come?"









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